# EDUCATION.

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## *PREMIUM ESSAY.*

### THE TRUE ORDER OF STUDIES IN PRIMARY INSTRUCTION, AND THE PROPER TIME FOR EACH.

BY ZALMON RICHARDS, A. M., WASHINGTON, D. C.

*Introductory Remarks.*

The course of training herein discussed is equally well adapted to the schools of the city and the country, whether graded or ungraded; provided, always, that the teachers are properly qualified and trained. While the course hereafter pointed out is flexible, it is believed to be specially adapted to the most natural and philosophical method of grading, which should always depend upon the degree of intelligence and mental development, rather than upon percentage by marking. Believing, also, that *moral training* is an indispensable part of school training, without laying down any dogmas, specific rules, or methods, and ignoring all religious creeds, the least that can be said here is, that one of the indispensable requisites for a good teacher is *moral fitness*, which should never be disregarded in the preliminary examination o. teachers.

The teacher should have *positive* and *active* moral characteristics. In other words, he should be a living example of the requisite virtues of a true human character. He should have such a training as will fit him also to have a clear understanding of all the practical principles of the "Golden Rule," and to illustrate and enforce the same by positive precepts and daily instruction. He should be qualified and ready to seize every opportunity (every day will furnish some) to enforce some healthful moral lesson, beginning with the first day of school.

THE ESSAY.

In determining what should be "the true order of studies," it must be taken for granted that the term "studies" means the same as subjects of training. The question then is, "What are the *proper subjects* for primary instruction?" Without discussing here the philosophy of mental development, specifically, it must also be taken for granted that the subjects of training should be such as most nearly correspond, and are most naturally adapted, to the order in which the mental faculties are developed.

All must admit that knowledge must be imparted, for the most part, at first, through the perceptive faculties; and that the reasoning and the reflective faculties are developed more slowly; and that mere memorizing ought never to be substituted for reflection and reason, as is too often done. Every experienced and thoughtful teacher must have learned that children in the primary grades of school instruction are unprepared, and even unable to study, in the true sense of that term; and that they must learn by being taught how to study. This, then, must be the principal work for children in the primary schools.

Before the true course of training can be fully understood and appreciated, we must divest ourselves of the almost universal notion that the children in the lower grades are to gain knowledge by studying lessons; for there is only a small portion of time, during the usual course of elementary training, when children are capable of studying. Ability to study depends upon three conditions: First, upon the ability to read and understand language, which is the principal storehouse of knowledge, as well as the medium for conveying all knowledge, which is outside of and beyond individual observation and experience. The acquisition of language, then, must become the chief work in elementary training, and must, consequently, form the most important part of a true order of studies or training.

In the second place, ability to study, or to gain knowledge by study, depends very much upon the proper development of the *observing* faculties, or upon the habits of observation. In proportion as any person has the ability, and the opportunity, and the will to observe the facts and the phenomena in the world around him, his demand for books and the necessity for linguistic training will diminish. A large amount, and, indeed, the most practical part of our knowledge, may be derived from observation, provided we have the opportunity, and have learned how to use our observing faculties properly.

Teachers can materially increase their teaching power by becoming careful and accurate observers. Very many people seem to go through the world apparently oblivious to the myriads of opportunities for

gaining knowledge, simply because they were never trained to habits of observation. Every course of training, therefore, should point out the best methods of cultivating the observing powers. To make a course of studies complete there should be exercises every day, in every grade, designed to cultivate these powers.

Again, in the third place, ability to study depends very much upon experience, or upon a proper preparation of young minds for acquiring knowledge by experimenting,—by personal examination of all objects and sources of knowledge. Nothing serves to fix knowledge in the mind more surely and permanently, and make it more ready for use, than working it out by experiment. All successful teaching is, therefore, objective, from the kindergarten to the university. In order, then, to prepare the pupil for studying, the elementary course of training should be such as will secure the most desirable instruction in *language*, *observation*, and *experimentation;* but as far as possible the course of instruction should be such as to secure simultaneous and harmonious development in each of these prerequisites to ability to study.

As the first and most important part of school-training consists in acquiring and in learning how to use language correctly, we must first find out, if possible, the best methods of teaching it. At this stage we are not required to teach language theoretically, but practically,—not its laws, but how to acquire and use it,—language as it relates to the realities of life, and especially to child-life, should form a part of early school-training. Language has become the most important representative of thoughts, principles, and facts. There is a language of language,—of its laws and methods of construction; a language of poetry, of prose, of rhetoric and logic; a language of geography, of arithmetic or numbers; a language of philosophy, mental, moral, and physical; a language of physiology, animal and vegetable; and a language of the arts and the professions, or employments of life. When the young are well trained in the language of the realities and idealities of life, or when they have mastered the language of the various branches of school-training, they have gained the most essential part of that training; have acquired a large amount of useful knowledge, and have a good preparation for the practical duties of life.

### GRADES OF LANGUAGE TRAINING.

In all the grades of language training it must be continually borne in mind that the faculties for observation and experimenting must be constantly in use.

*First: The Work Grade.*

To acquire the proper knowledge and use of language, the first thing necessary is to learn to recognize readily the *oral* and *written* signs of all ideas and things. Naturally, then, things must precede words. Comenius says: "Things and words should be studied together; but things especially, as being the object both of the understanding and of language." Again he says: "A boy may be able to say over a thousand times, a thousand words; but if he has not the mastery of the things, of what benefit will all that multitude be to him?"

Objectively, then, the first natural step in teaching language is to impress the idea of some object or thing upon the learner's mind, which is within his comprehension, by the aid of the object, picture, or illustration. When the *idea* is clearly and permanently impressed upon the pupil's mind by any means whatever, and the oral word-sign is made familiar to the ear, then the written or printed sign of the *same* idea should be made so familiar to the eye that the object, or picture, or the oral word-sign, shall call it to mind, and *vice versa.* This course should be pursued continuously and daily, with every new idea imparted, by adding new ideas as fast as the learner can comprehend and retain them. To secure a perfect retention of these new ideas there must be daily reviews and repetitions of the ideas and signs learned. But, again, while mastering the word-signs, orally as well as visibly, the learner should be taught to recognize at once all the elementary sounds in the new words, and, finally, give the names of the characters and combinations of letters commonly used to represent the sounds.

When the above work has been well done the learner will be able to call most new words quite readily by giving the sounds usually represented by the letters. But the meaning of every new word should be taught *objectively.*

*Second: The Sentence Grade.*

The next grade of language-training will introduce the learner to the work of getting new ideas and new knowledge from words used relatively in short and easy sentences. In this grade, as in the first grade, new words, as representatives of new ideas, must, as a matter of course, be continually introduced, and learned as heretofore directed, until the learner has largely increased his vocabulary and has acquired the ability to use understandingly and readily all the words in common use, and to make out the meaning of words from dictionaries. To be able to acquire the relative ideas of words used in sentences is an important step in gaining knowledge through the

perceptive faculties. Simple sentences, therefore, must be used at first, which may be modified in various ways, greatly to the growth and pleasure of the young mind. As the mind becomes more developed, simple sentences may be compounded and variously modified so as to furnish appropriate exercises for preparing the pupils to take pleasure in gaining knowledge directly from books.

But the learner will be expected to acquire considerable skill in clothing his own ideas correctly in *oral* aad *written* language. One of the continued exercises of this grade should be the reproduction in the learner's own language of the ideas which he may have gained from reading and listening to the language of others; but every reproduction of an oral or of a written idea must be put into as accurate language as possible. It may be proper to say here that this peculiar training should be made prominent in every grade of school instruction. But to make the preceding grades comprehend all the essential training in the language of common things, the language drills should embrace *all subjects* which come within the learner's comprehension, beginning with the simplest elements in all cases.

*Third: The Practical Grade.*

The next natural step in language-training consists in applying language to the acquisition of the various branches of study, and to the special realities of life. Every language-lesson should be so designed, if possible, as to impress some valuable knowledge upon the young mind. The lesson is just as efficient and pleasing to the child if it contains good sense and something useful, as when it contains nothing but nonsense and useless words. No child can afford to fritter away any portion of his life in senseless and useless exercises, since there is vastly more useful knowledge, adapted to child-development, than he can acquire.

*First*, there should be practical language-lessons in arithmetic or numbers. Arithmetical reading-lessons should be prepared, or selected, in descriptive and story form, which contain numbers and simple arithmetical operations, to be performed before the pupil can fully understand the lessons. The most effectual mode of training pupils to think arithmetically is to require them to read the language of numbers at the same time that they are learning the use of common words. If appropriate books are not provided for this kind of training the teacher should prepare and tell some suitable stories for training children to think arithmetically, and thus make them familiar with the terms and elements of arithmetic, preparatory to the studying of a complete work.

Again, there should be practical language-lessons in geography,

collateral with those in arithmetic. Geographical reading-lessons, therefore, should be selected or prepared in connection with globes and maps and other apparatus, for illustration, to make the pupils familiar with the language and elements of geography. In this way they are to become familiar with reading and spelling geographical names, so that, if desirable, they may be prepared to take up afterward, more successfully, an elaborate and complete course.

Again, without further specification, reading-lessons, prepared or selected,—designed to train the children in the language and elements of all the other necessary branches of school-training, — should be used as collateral exercises with those above-named. In this way the children will become familiar with the language and elements of civil and natural history, human physiology, botany, etc. In addition to the one-year course, hereafter prescribed, in kindergarten work, four years will be sufficient to go through the preparatory course of training in language, observation, and experimentation, previous to entering the grammar schools.

After this, the pupils will be well prepared to take up successfully the study of the usually complete branches of school-training, in complete text-books, provided the language-reading lessons heretofore used have contained a sufficient amount of facts and knowledge within the range of the comprehension of the pupils; and further, provided the teachers have the qualifications, training, and experience suited to such work.

But the chief obstacles in the way of securing the most satisfactory success, in carrying out the foregoing principles of language-training, will be found in the want of properly qualified teachers and of appropriate reading-books. The right kind of normal school should furnish teachers theoretically and practically trained; and when such books are prepared as will contain the matter, and point out the work to be done in the elementary linguistic training of children, the work of educating the children in our schools will be more efficient, and more agreeable to the pupils as well as to the teachers. Until suitable books are furnished, every effort should be made to secure such works as come nearest to these principles.

If the first five years' training of children be conducted upon the principles above indicated, they ought to become quite familiar with the elementary principles of arithmetic, geography, and all the other necessary branches of school-study; and they will have so learned to write a fair hand and to spell all common words that, if for any cause they should be unable to continue in school, they will have made such advancement as will enable them to perform the common duties of

life with much success. They will be prepared also to gain knowledge from books, and to study without the aid of teachers. This becomes, then, a very important period in the lives of children. Those who may continue in school will have a thorough preparation for the studies of the grammar schools, and those who must take another course of life will find that the training they have received will be of great value to them.

### THE KINDERGARTEN.

Before proceeding further it may be necessary to say, by way of explanation, that the first year of the five-years' course, beginning at the age of five, might well be called the *kindergarten year.* Every thinking, logical, and philosophic mind must see that the fundamental principles of the true kindergarten are natural, and lie at the foundation of all correct child-training.

It is highly desirable, therefore, in order to secure the proper development of children and prepare them for the course of elementary training to be hereafter described, that they should enjoy one year's training, at least, in a well-regulated kindergarten, perhaps somewhat modified from Froebel's plan. But as there are few, if any, institutions in this country which work strictly upon Froebel's plan, and as there are very few of the many kindergartens of the country which wholly harmonize in their work, there should be devised some plan which shall secure the most valuable and important elements of Froebel's system, to be used in such a manner as to harmonize with the appropriate work of a well-organized primary school. The attempt will be here made to make the following course of training embrace these elements, harmonized.

It may be here premised that this first year's course of training, as well as the future course of elementary training, should be based and conducted upon the analogical principles recognized by Froebel, in selecting gardening as an appropriate representation of child-training.

1. The good gardener will select the purest and best seeds and rootlets for sowing, and transplanting in his garden. So the good kindergartner will select practical truths and useful realities to be used in training children.

2. The good gardener will break up and prepare the soil and get it ready for the reception of seeds and for the influence of heat, air, and moisture. So the good kindergartner, or teacher, will be very careful to prepare the young minds for the reception of instruction by proper appeals to the emotions, the feelings, the curiosity, and the interests of his pupils.

3. The good gardener will not permit the young plants to grow in the wrong direction, or become choked with weeds, or to be exposed to injurious outside influences; but, if necessary, force the plants to incline in the right direction, eradicate all weeds and remove obstructions, and protect the plants against all storms, frosts, and marauders. So the true kindergartner will watch carefully every improper bias and inclination and disposition of the young minds, and bring them under proper influences and give them proper direction, *voluntarily* if possible, but *forcibly* if necessary. Recognizing these principles practically, and eliminating all the unessential exercises of the kindergarten, and spending less time in many other exercises, all the real advantages of the kindergarten can be secured in one year, and the pupils can be introduced successfully into the higher grades of language-training in primary schools.

The work of the kindergarten year may be divided appropriately into *two grades*, of about twenty weeks each. This feature may be modified, however, to meet the views of the kindergarten teacher. But there should always be attractive, appropriate, and comfortable rooms provided. These rooms must be furnished with the most appropriate seats, tables, and other necessary furniture. And, finally, each school must be supplied with the proper kind and amount of kindergarten apparatus and material. The last, but not least, important requisite in the kindergarten rooms, is an experienced, well-trained, well-educated, conscientious teacher, who is a lover of children and who can control herself as well as the children.

### THE FIRST OR KINDERGARTEN GRADE.

While the exercises of this first year's training must be under the direction of the teachers,—who must have full liberty to select and arrange the special work,—there are certain general principles and ends which must distinguish and regulate the whole work.

1. This is the period when children should be made familiar with common things, and form habits which will follow them through life.

2. The length of time which should be spent in the school-room each day must depend upon the nature and character of the exercises in which the children are to engage; but in ordinary cases it should not be more than three hours, provided the whole attention of the children is engaged. About one-third of this time should be spent in such plays, songs, and exercises as will develop properly the physical powers of the children and keep them in robust health. Most of the kindergarten plays will serve a good purpose; but the teacher should have inventive power enough to vary or modify them, or introduce

something new, when necessary to reëngage attention and increase the interest and pleasure of the children. These exercises should be such as will employ the hands, the feet, the eyes, the ears, the voice, and all the muscles of the body; but they should never become dull and monotonous. As soon as the interest begins to flag, a change should be made, with the least ceremony and delay possible.

3. In all the other exercises, which may be called mind-training, the chief object should be to wake up mind, develop and strengthen its powers, in every exercise of every kind. These exercises should be such as will promote and cultivate the habits of attention and observation; quickness of perception; ready discrimination of form, shape, size, length, breadth, height, color, and all other characteristics of bodies and things which are cognizable to the perceptive faculties. Here may be used the sphere or ball, the cylinder, the cubes and other solids, with their various modifications; all kinds of surfaces, lines, points, etc., with such applications and uses as are usually made in using Froebel's twenty gifts.

The teacher must bear in mind continually, that in using these gifts, the purpose is to increase the intelligence of the children, improve their powers of observation, and develop habits of accurate discrimination, so that they may readily distinguish similarities, contrasts, and differences in objects of sense. The works of nature and of art will furnish an endless variety of new educational gifts, and at the same time present thousands of examples for illustrating the principles involved in these gifts.

4. Again, the laws of human development demand that, from the beginning of this course of training, the children should be made familiar with the word-signs of as many of the objects presented, and with the characteristics of the same, as possible. During the first part of this year the children may learn the word-signs,—which are presented to the *ear*,—as a beginning to the work of oral language-training. During the last part of this year the children should begin to learn the word-signs of the objects with which they are acquainted, as they are presented to the *eye*, as a beginning to the work of written (or printed) language-training.

As there will be many schools which will not introduce the kindergarten grade into their course of training, the method of teaching sight-reading will be pointed out in the next, or first primary grade, to which the teacher of the kindergarten grade is referred. (This is done to avoid repetition.)

The above suggestions are sufficient for a properly qualified teacher of the first, or the kindergarten grade, who ought to be able to outline specific daily exercises, based upon the above principles.

COURSE OF PRIMARY TRAINING FOR FOUR YEARS.

The training in the several following grades will, for the most part, be indicated suggestively, as heretofore indicated in the kindergarten grade. This is done for two reasons: First, because the fundamental principles of training, which should govern the teacher in the kindergarten, are believed to be equally important and necessary for the teachers in all the following grades. Second, because, when a properly qualified teacher knows what work is to be done, and what results are to be attained in certain periods of time, it is believed the following suggestions and methods of training for each grade will be sufficiently specific. It must be taken for granted, however, that there is a supervising head who is master of the whole art of teaching, and can drill and train the teachers for this work.

FIRST YEAR — PRIMARY.

1. The average age of children in this grade should be ordinarily from six to seven years.

2. No class-exercise should continue over twenty minutes; then there should be a change of some kind.

3. During any prescribed exercise there should never be anything else going on in the school-room which is calculated to distract the attention of any member of the class.

4. Not only should the attention of all the class be free from distraction and diversion, but special effort should be made to awaken and keep up the deepest and liveliest interest, on the part of the children, in the subject-matter of every exercise.

SPECIAL WORK.

*First Exercise.* A language lesson should be given. Short, interesting, and instructive stories should be selected or prepared by the teacher with the view of training children to listen and acquire the use of words. The story should be made up of *truth* and *facts*, and be told in a simple and interesting manner, but always in good language. Then the children should be required to repeat the same story in the best language they can command, with the assistance of the teacher when necessary. At first very short stories should be told, occupying about one minute; and then the time may be lengthened as the minds of the children are developed. This should be a regular daily exercise.

*Second Exercise.* To increase intelligence, form habits of observation, and keep up the acquisition and use of language, objects of interest to the children,—of almost any kind,—should be collected

daily, and brought into school by the children as much as possible, and made the subjects of explanations and of conversation, in order to impress upon their minds the prominent characteristics and names of the same. The more the children select their own objects, the more interest they will feel and the more will their powers of observation be increased,—a result too little thought of in the work of training children. If this work is properly done, the children will go through the world with their eyes open and with minds eager to gain new ideas.

*N. B.*—As soon as the children know the object and can call its name at sight, judging from its peculiar characteristics of form, size, color, etc., the printed or written name of it should be put upon the blackboard in neat, distinct letters, and impressed upon the eye until the name can be easily called at sight. This exercise should be repeated until the first sight of the object will call to mind both the oral and the printed name, and also until the sound or sight of the name will call to mind the object. In this way the name of every new object, or the word-sign of every new idea, should be learned. Just as soon as possible all pupils should have a little blank-book in which they should be taught to write or print all new words, so that they may read them over by themselves, or in the class, until they are fixed in the mind.

It would add to the efficiency and pleasure of this exercise if each pupil had a separate drawer or box in which could be deposited his own collections, so that they could be occasionally reviewed. Every child should be instructed to bring in, if possible, some new thing, each day, which has not before been presented to the class.

This exercise will be an excellent substitute for, and in advance of, Froebel's gifts, for there is hardly a limit to the amount of instruction and knowledge which may be imparted in this manner. It makes the children familiar with the characteristics and names of common things, both to the ear and eye, and greatly increases their vocabulary. Half or three-fourths of an hour daily, for the first ten or twelve weeks, should be spent in these and similar exercises. But the teacher should be trained, and must specially prepare herself for this work. In fact, all special object-lessons and experiments may be brought into this exercise, when the children should be taught to exercise their own powers and find out *new* things by themselves.

*Third Exercise.* To prepare the children for gaining knowledge from books they must learn to read. To acquire this most valuable accomplishment, the children must be made familiar with the sound-elements of words, and with the names of the letters and the combi-

nations of letters which represent these sound-elements. (Here seems to be an opportunity to put in a plea for a reformed phonetic alphabet.) Even with our imperfect alphabet, the facility and readiness to *call* and *form* words correctly depend very much upon the degree of perfection with which these sound-elements and their representatives are mastered.

To obviate and overcome as many of the obstacles presented by our imperfect alphabet as possible, and to provide a more expeditious method of learning to read than that of any of the partially phonetic methods, which require the learning of two alphabets instead of one, it may not be out of place here to at least recommend a plan which has been tried and fully proved, by which the sounds and letters used in word making can be so learned and mastered as to avoid many of the absurdities and contradictions which are so troublesome in the usual methods of learning to read.

### THE PLAN.

1. The first part or step of this plan consists in carefully selecting twelve short, simple object-words which contain all the letters of our alphabet, and require twenty-four of the elementary sounds to form them; but no one letter in these words represents more than one sound. The mastery of these twelve words will enable the children to learn twenty-four of the elementary sounds, and the names of all the letters, phonetically; and they learn also to distinguish the sound of a letter as having nothing to do with its name, so far as uttering words is concerned. This device serves very many of the purposes of a strictly phonetic alphabet.

The following object-words are used: viz., *cab, lad, hen, fox, jug, wing, yak, map, quill, rod, vest,* and *adz.* No letter in any of these words, except *u* in quill (equal to *w*), has more than one sound. In mastering these words, as should be the case in mastering any new word, the first thing is to see the object, or its picture, represented by any one of the words, and learn all that is necessary to be learned about it, making it an object-lesson. When the children can call at sight every one of these twelve words, and understand its meaning,— or when the first sight of the object, or picture, will call up its word-sign, and when the word-sign will call up the object, — then the teacher may proceed to analyze the sounds in each word. First, she should pronounce the word distinctly, giving every sound in it, and then require each pupil to do the same, as perfectly as possible. Second, she should proceed to give each successive elementary sound, and then require each pupil to do the same until he can enunciate

each sound in each word, in its order, without the teacher's aid, and then point out any letters which are not sounded, or give the silent letters.

The twelve words are all monosyllables; but if, afterwards, new words of more than one syllable are to be learned, each whole word should be analyzed,—first into its syllables; then the sounds of each syllable should be enunciated and articulated, and finally all the syllables pronounced again with distinctness and proper accent. Of course the meaning of each word is to be taught *objectively*, in all cases, before it is analyzed. This process pursued continuously will secure the perfect enunciation and articulation of all elementary sounds, and the proper pronunciation of words, without the aid, afterward, of any elocutionary teachers.

2. The second step in this plan consists in making the pupils familiar with the names of the characters and combinations of characters which are used to represent the elementary sounds. This step is essential, though of small importance comparatively, for the names of letters are of no use in learning to read.

To teach the names so that the pupil shall not confound them with the sounds they represent, the teacher should first enunciate the first sound of any word distinctly, and then give the name of the letter or letters which represent the sound by telling the pupils that each letter, like each little boy, has its own name. Then the teacher may print or write, neatly, each letter upon the board and give its sound again. Then the pupils should be required to give, first, the sound and after this the name. This process should be followed with every one of the words, and repeated until every pupil has become familiar with all the names and sounds.

When a new word is to be learned the pupil should never be allowed to give the names of the letters, but the sounds they represent, before calling the word. As far as possible children should be required to call words at sight, but when unable to do so they must be trained to give the sounds which the letters or combinations of letters represent By this process they will generally be able to give the proper pronunciation of the word, which they can never do by giving names alone. After a few lessons of this kind upon the twelve words, the children will have learned all the names.

3. The third step in this plan consists in making the children familiar with the remaining sixteen or seventeen elementary sounds. They have already learned to give the names of all the letters; but as some letters represent more than one sound, and as some sounds are represented by combinations of letters (because of our defective

alphabet), the pupils must be made familiar with the various sounds of each letter and the combinations of letters. To accomplish this work sixteen other object-words are selected, which are to be learned and analyzed in the same manner as the first twelve, except that there are no new names of letters to be learned.

The remaining sounds are represented in the following sixteen object-words. The monosyllabic words selected are: *Cake, ball, car, deer, pipe, rope, church, spoon, foot, thumb, scythe, ship, rouge, boy, cow.* When the pupils have thoroughly learned the meaning of these twenty-eight words objectively, and can call them readily, at sight, in print or script,—when they can analyze them by giving distinctly all the elementary sounds, and the letters or the combinations of letters which represent the sounds, and when they can readily point out all the silent letters,—they are prepared for the future continual practice of calling new words by sounding the letters, simple or combined, which represent the sounds in them, and by giving the names of letters, used or silent. By this time the most formidable difficulties in the way of learning to read will have been overcome, and the pupils will have gained considerable skill in finding out how to call new words. But these exercises must be continued regularly until the pupils have become familiar with all the common words of life; and it must not be forgotten that every new word must be learned objectively or by illustration, so that they may always know its meaning and use.

The length of time necessary to accomplish the above work should not be over six or eight weeks, and it may be less.

4. The fourth step in this plan consists in making the pupils familiar with the common order of the letters of our alphabet, and with the capital letters. Various devices may be adopted to secure this end, but none better than a chart, or a neat script or printed representation upon the blackboard.

5. The fifth step consists in combining words into sentences, so as to train the children to gain the meaning and use of words, relatively, and furnish them test exercises in calling words at sight. These exercises really begin the work of learning to read, and must be continued in some form, with charts, books, or with printed or written exercises upon the blackboard, during the whole course of elementary training, so that the children may gain the ideas and meaning of all kinds of sentences as readily as of words and pictures. At first the sentences should be simple, and they should always contain some useful idea. Then they may be modified by words and clauses as soon as the pupils can comprehend them. After this, compound and

complex sentences may be used. Reading charts and primary readers should always be prepared upon the principle herein recognized, because it is in accordance with the law of mental development.

6. The sixth step, which is necessary to make children acquainted with all the visible signs usually employed to make our written or printed language, consists in making children familiar with the common method of representing *numbers*, by the use of the seven letters of our a'phabet, I, V, X, L, C, D, M, in connection with the Arabic characters, 1, 2, 3, 4, 5, 6, 7, 8, 9, 0. Simple devices, and frequent exercises upon charts or blackboards, will very soon make children familiar with these signs. Whenever lessons or pages are indicated by these signs, children should be required to read them until they know them at sight.

7. The seventh and last step in learning the signs which are used to represent written language, consists in becoming acquainted with the *marks* commonly used to indicate the kind of sentences and *pauses* by which the reader may be aided, through the eye, to comprehend the meaning of the language used. As they are essentially artificial aids in comprehending the meaning of language, the pupils should learn, at least, their *practical* use; and be able to recognize them at sight. Every reading exercise will furnish examples for practice. The punctuation chart, or a representation of the characters upon the blackboard, should be frequently used until these marks are learned.

When the principles embraced in the *seven steps*, heretofore indicated, are thoroughly mastered, the pupils have learned the meaning and use of a *large number of words*, and of the *elementary sounds* and the *names of the letters*, and the combinations of letters used to represent these sounds; they have also learned all the other signs used in written language, and have learned to acquire the relative meaning of words in sentences. Besides all these important and unusual acquisitions, the pupils have acquired an ability for making out the pronunciation of most new words without the aid of the teacher, or by a few suggestions from the teacher, from time to time.

To accomplish the work above indicated, not more than twenty weeks, of five days each, with two exercises daily, of about twenty or thirty minutes each, are required by a skillful teacher.

**[To be concluded in next Number.]**

## *CHRISTIANITY, NOT INTELLECT, IMPERIAL.*

BY REV. WILLIAM M. THAYER.

We hear and read much concerning the "Imperial Power of Intellect." The theme is one of fundamental importance in education: for, while intellect, in its grand career, is royal indeed, it is by no means *supreme*. As the sun is the center of the solar system around which the planets revolve,—

> "Forever singing as they shine,
> The hand that made us is divine,"—

so Christianity is the centre of the moral world, around which education, freedom, and all the other satellites of true civilization perform their majestic orbits. Put one of the planets in the place of the sun, and the harmony of the planetary world is utterly destroyed, and the earth itself, on which we dwell, goes rushing into "chaos and dark night." Put education in the place of Christianity, and the harmony of the moral world ceases forever,—

> "And darkness, doubt, and long despair
> Reign in eternal silence there."

Nevertheless, a class of modern philosophers teach that intellect, rather than Christianity, is imperial. This is expected of "empiric philosophers," of either sex; but we refer rather to a class more directly engaged in the education of the young. It is the same now, substantially, as when Paul preached at Corinth. Learning declined to accept the Gospel even as its equal. Barnes, commenting upon the fact, says, "There is something about the pride of learning and philosophy which usually makes those who possess it unwilling to sit at the feet of Jesus." Christianity requires that their "learning and philosophy" should be laid upon its altar, in order to accomplish the most good: and this they are unwilling to do. They believe that intellect can take care of itself, and its votaries, also; and that really its true mission is separate from and superior to Christianity. The latter makes intellect a planet, but they want to make it a sun. They are quite willing that Christianity should revolve around intellect, and would not object to its existence upon this earth so long as it moves in that orbit; but they are not willing that intellect

should revolve about Christianity,—that is too humiliating. It is precisely here that education will fail, if it ever fails, by declining to become an agent, or potent force, in the plans of the Christian religion. There is no possible way for learning to do so much for the human family as it can by putting itself under the direction of Christianity.

Again, there is a strong feeling abroad that education will save the Republic. Were the term 'education' used here in its broadest and best sense,—to embrace Christian culture,—that would be true: but it is used in the narrow sense of intellectual development, — national safety in schools. Making more of the sentiment than was ever intended,—"the safety of the Republic is in the intelligence of the people,"—they rest the hope of the Nation in institutions of learning. This is a singular conclusion; since schools alone never saved any nation yet; and the record is well known. The most brilliant intellectual opportunities of Greece and Rome did not save them from corruption and overthrow. They were more unsaved by their mental splendor than they could have been without it. Their corruption, shame, and ruin were more complete in consequence of great talents and high culture divorced from moral principle. An educated giant is a giant curse, without moral character; and it is worse with a nation than it is with the individual. If there ever were an instance of schools saving a nation, in all the ages, there would be some reason for attaching this high-sounding title "imperial" to intellect; but since there never was such an example, and learning has only *helped* Christianity do it, the claim is preposterous.

There are well-meaning, but unthinking, people who believe that Christianity should have nothing to do with the State, and, therefore, nothing to do with the schools which the State supports. It may meddle with *private* schools as much as patrons will, but with the great public affairs of the land it must not interfere. In domestic and social life it may be very well; in the church and house of mourning, better; and they have no objection to its influence in assisting the trader to measure tape or weigh tea honestly, but keep it there, within its appropriate sphere. There is too much "dirt" in politics for it to touch them, and too much dignity in legislation for its dictation. Hence they would exclude the Bible from schools and Congress, and limit prayers to domestic and Sabbath altars.

Yet, again, some parents appear to believe that a thorough mental education is all their children need to make them successful in life, and win the confidence and respect of men. They would not see them immoral by any means, nor do they anticipate any such results.

They appear to think that education alone insures them against moral mistakes and shipwrecks. The son comes out of college, and the girls, too, with an air that seems to say, "I have been through college; show me the deference which this fact demands; give me the place which this fact ought to assure." We say there is a class who thus indirectly proclaim to the world that they believe in the "Imperial Power of Intellect." It may be a small class, and a brilliant one, too,—so much the worse for them! Did they fully accept the Bible idea, that education is subordinate to Christianity, they would not graduate with as little thought of personal responsibility for talents and opportunities enjoyed as children possess, nor be so utterly oblivious to the motive of living to do good in the world. We have seen some of this class canonizing their intellectual idol, as Thoreau in the Concord woods, and pouring out the incense of admiration and praise before it as if it were the part of intellect to shine like the fire-fly, and perish! It is one of the most pitiable spectacles in Christendom,—Thoreau in his forest-cabin! Grant that he was a "child of Nature," and a "fine, talented man,"—what of that? So much the worse for the possessor in this world of ours, where every day calls for philanthropy, and every hour for self-denial and Christian work! Put Gabriel himself into the Concord woods, and shut him up within himself, month after month, when he ought to wing his way on errands of mercy to the wandering and lost of earth, and even he would be an angelic failure. When an angel fails, his failure is mammoth compared with that of a man. When a Thoreau fails, his failure is greater than that of common mortals. If he had possessed but one talent and buried *that*, his sin would have been great enough; but to possess five, and bury them all in one hut in the Concord woods, is mountainous sin. What though he "holds sweet communion with nature"! He abjures communion with the highest form of nature that God bestows,—a human soul! He deliberately forswears his kith and kin, and refuses to "rejoice with them that rejoice, and weep with them that weep." And, worse still, he denies the claim of personal responsibility to God and man, and his bounden duty to do good to his fellows, and make the world better by living in it. There could not be a more selfish and shriveling view of human life than this,—brought down almost to the level of the conies and insects he was said to tame. Great business that,—charming the denizens of the forest, and neglecting the claimants of his own race! Throwing away intellect and time upon hares and pismires, when the wide world of want and woe was open before him, calling for help! Plying his little canoe on Walden Pond, when, as he said,

he "got the world by the nape of the neck and held it under, in the tide of its own events, until it was drowned, and then let it go down stream like a dead log"! Horrible for a human being who might become a power for usefulness in the world! A poor, conceited, selfish, miserable Jonah, running away from duty, without the prospect of a whale's belly for a school-room! No wonder that he could write, "The whole enterprise of this nation is totally devoid of interest to me. There is nothing in it which one should lay down his life for, —nor even his gloves." Verily, he told a plain truth when he said, "I am something to him that made me, undoubtedly, but not much to any other that he has made."

Once more, large numbers of people are so fearful that sectarian bias will be given to religious instruction in schools, that they deny any place to Christianity in popular education. They think that the absence of all Christian instruction is preferable to the presence of the smallest amount with sectarian tinge. "No matter what a man believes, if his life be right." "The light of nature and conscience are sufficient to guide." "If a man be sincere, no matter what he believes." "At best the teachings of Christianity are uncertain." These are some of the maxims that influence men to make education superior to Christianity. The popular sentiment is more or less affected by them; and we submit that the fruits of it appear in the fact, that many graduates of American colleges array themselves substantially against the Bible. Many others put a very light estimate upon Christianity and its institutions, and seem to take pride in the declaration that they are not under any such "yoke of bondage" as the Gospel imposes. Quite a number of the late graduates of a New England college announced to the world that they were followers of Ingersoll. Almost any Christian man, who is a college graduate, can recall facts respecting his own class which confirm the foregoing statements.

We are not claiming that there is more of a disposition to divorce education from Christianity *now* than there has been for fifty years, and more; nor that it is peculiar to the American system of instruction. Indeed, we believe that there is increasing recognition of the claims of Christianity to superiority over learning, just now, and that educators and leaders of thought in our country are feeling, more than ever, that the founders of New England were right in making the meeting-house and school-house, like the Old and New Testaments, two parts of one harmonious whole. It is quite evident, also, that the educators of America, as a class, are in advance of those in Europe upon this important subject. Sentiments adverse to the im-

perial power of learning obtain to considerable extent in American institutions; but, in Europe, their sway is powerful. Dr. Thomas Dick said, as long ago as he wrote his *Improvement of Society*, "In the academical prelections on physical science, in most of our colleges and universities, there appears a studied anxiety to avoid every reflection that wears the semblance of religion. From the first announcement of the properties of matter and the laws of motion, through all their combinations in the system of nature, and their application to dynamics, hydrostatics, pneumatics, optics, electricity, and magnetism, the attention of the student is kept constantly fixed on secondary causes and physical laws, as if the universe were a self-existent and independent piece of mechanism; and it is seldom that the least reference is made to that Almighty Being who brought it into existence, and whose laws and operations are the subject of investigation." Later than Dr. Dick, Mr. Ruskin, who deserves to be classed with Hooker, Jeremy Taylor, and Herbert, as a Christian philosopher, said, "Our system of European education despises religion. There is much talk and much teaching in all our academies of which the effect is not to bind, but to loosen, the elements of religious faith. Of the ten or twelve young men who, at Oxford, were my especial friends, who sat with me under some lectures on Divinity, or were punished with me for missing lectures by being sent to evening prayers, four are now zealous Romanists, a large average out of twelve; and while thus our own universities profess to teach Protestantism, and do not, the universities on the continent profess to teach Romanism, and do not,—sending forth only rebels and infidels. During a long residence on the continent, I do not remember of meeting with above two or three young men who either believed in revelation or had the grace to hesitate in the assertion of their infidelity."

But, without pursuing this phase of the subject, there are several cogent reasons for making Christianity, rather than learning, imperial.

1. All things belong to Christ in the Divine plan. "All things were created by him, and *for him*." All that we behold in Nature,—oceans, hills and vales, forests and fields, the sun and starry firmament, angels and men,—was made for Him! All that we behold in Providence,—change, revolution, progress, government, liberty, science, art, and literature,—all are used to build the kingdom of Christ. We do not behold the real glory of earthly things until we discover their place by embracing this sublime truth in the Divine plan. With the telescope the student may sweep the firmament, beholding

a hundred million suns, each the center of a mighty universe, and explore the realms of space until imagination tires, and his soul pauses in awe before the grandeur of creation; and still he fails to comprehend the true mission and glory of these works, until, like the sweet singer of Israel upon the hills of Judea, he reverently lifts his heart to God, impressed by the Divine uses which they subserve, with the truly Christian thought, "When I consider the heavens the work of thy fingers, the moon and the stars which thou hast ordained; Lord, what is man that thou art mindful of him, and the son of man that thou visitest him!" Man, with all his endowments and acquisitions, is insignificant, except as he derives importance from the position God has assigned him among the works of creation. He is of more consequence, with his learning and accomplishments, in the service of Christ than he can possibly be elsewhere. In his greatest progress he cannot advance beyond his Master, nor can science advance beyond the Bible. "After all the gigantic strides which she has made, and is still making, science has found it impossible to leave the Bible behind. However deep she has dug into the surface of the earth, and however high she has climbed to build her nest among the stars, she soon finds that the Bible is close at her side. Nay, more: when she has taken the wings of the morning and said, "I will dwell in the uttermost parts of the sea," and when she has found some far-off island, in some remote nook and corner of the universe, which she is about to call her own by the right of prior discovery, she finds, to her amazement, that the Bible has been there before her,—the pioneer and the very prophet of discovery!"

Christianity claims every foot of our National domain; and she will possess it. Her faithful agents penetrate where commerce shrinks from going, and, kneeling upon the uncultivated earth, pledge to God schools, domestic altars, order, public tranquility, progress, mental and spiritual growth, that other New Englands may be carved from the great empire of our West. She commands the heart of the Christian and the brains of the artisan to dot the "New West" with houses of worship, institutions of learning, halls of legislation, warehouses of commerce, workshops of mechanics, and every other facility of human progress, that shall make the "Golden Gate" as Plymouth Rock. Verily, Christ's title to the heads of men is as clear as his title to their hearts! He came to destroy the "works of the devil," of which *ignorance* is conspicuously one; and the weapon of its destruction which he wields is Education.

2. Christianity stimulates Intellect. Schools and colleges spring up and multiply in its pathway,—nowhere else. There is the most

intellectual power in those parts of our land where there is most religious power. New England is preëminently religious; she is preëminently scholarly, too. She supplies other portions of our land and other countries with educators as she does with preachers. Proclaiming that "wisdom and knowledge shall be the stability of the times," she raises up scholars as well as Christians; and, next to her Christian preacher, her Christian scholar is her most powerful agent.

There are hundreds of ministers and other professional Christian gentlemen in our land who never would have sought a liberal education but for their consecration to Christ. The thought was not entertained until they became Christians, when a sense of personal responsibility, begotten by the Spirit of God, awakened a strong desire to make the most of themselves for future usefulness. What but a new impetus given to the mental faculties of John Bunyan, an ignorant, profane, degraded tinker, by coming to Christ, could have made him the wonderful man that he became,—author of the most unique, fascinating, and finished allegory in the English language? What but this could have changed the corrupt hearts of Agustine and John Newton, at war with home and kindred, and all that makes manhood worthy of the name, and transform them into useful citizens, kindling their intellects into flaming torches to be borne around the world?

3. Christianity requires the education of the masses. There are no free schools where Christianity is not. Even where Christianity exists in a corrupt form, free schools cannot exist. When slavery was tolerated and fostered in our Southern States, there were no free schools. Southern policy was not to plant the school-house beside the house of worship. Free schools are antagonistic to slavery. Ignorance forges chains; education breaks them. Christianity demands the education of the negro, but slavery says, "Nay, then he is no longer a slave," As soon as Christianity educated the American people to know, feel, and swear that every man, black or white, should be free and taught, and they were willing to fight for it and die for it, slavery ceased to be, and free schools began to rise upon its ruins.

Education, of itself, is selfishly inclined. It fosters the spirit of caste. In the brilliant ages of Greece and Rome, when intellectual culture was at its zenith, few only were educated; the masses were ignorant and oppressed. Education must be Christianized. The Christian spirit only will give education to every child. It is the necessity of the hour. It is not necessary to multiply great talents to secure the peace and prosperity of our republic; but it *is* neces-

sary to educate the masses. Our greatest peril lies in untaught minds; and without the stimulus and aid of Christianity that peril will never be removed.

4. Christianity encourages the education of the young to the utmost extent of their abilities. It would develop the best there is in their three-fold nature. It is satisfied neither with partial education nor with the training of the intellect at the expense of the heart; nor *vice versa*. It counsels the harmonious culture of all the powers, not so much for a particular vocation as for any position Providence offers. The true scholar makes the most of himself possible, and this is precisely what Christianity demands. Some modern philosophers say, "Accept nothing you do not understand,"—advice that would make human creeds very short; but Christianity claims that the best growth of humanity, as well as of religion, depends upon studying and accepting what the mind cannot now understand. The young would make very little progress in mathematics, astronomy, and other branches if they ceased to study where they failed to comprehend. They may imagine that their tasks are onerous, and perhaps unreasonable, but Christianity bids them remember that they are under obligation to do that for which, in themselves, they have not present ability. It is the only law under which they can develop into true manhood and womanhood. Christ commanded his disciples to feed the five thousand when he knew they could not. "Give *ye* them to eat." "We have only five loaves and two fishes," they replied; "we cannot do it." Still he commanded them to make ready, as if they possessed sufficient food for the multitude. The scholar must pursue astronomy as if the whole system of Copernicus were at his command, and, by-and-by, it will be. In this way boys and girls grow to greatness and goodness,—just by studying what they do not understand, and striving to do that for which they are not yet equal. Under this Christian plan their faculties are developed to their utmost extent, and they make the most of themselves possible.

## THE STUDY OF HISTORY.—(I.)

BY LUTHER H. PORTER, EAST ORANGE, N. J.

The scientific method which distinguishes nearly all branches of modern investigation has been, till recently, conspicuously absent from historical research. During the past century it has been applied to all sciences with highly successful results, both in classifying existing knowledge and in leading to work of a more exhaustive character than any which had preceded. Many new facts have been discovered; new laws have been deduced, and definite knowledge has replaced theory. We have today, as the result, the exact sciences. Recognizing that the immutable law of cause and effect regulates all life, the principle which controls all existence is known, and it only requires a sufficiently broad knowledge of facts pertaining to the class under consideration to develop the distinct character of an exact science. We have an universal and absolute principle as a guide. Then, when the facts of a certain class are understood, they can be arranged with exactness, and results predicted with certainty.

In most physical sciences it is comparatively easy to learn the precise nature of objects; hence, easy to classify and reach exactness But, with every advance from that which is purely material to that which is immaterial, new factors, not readily understood, appear. It becomes continually more difficult to reach the final analysis, and the element of doubt increases. In chemistry, formulæ are susceptible of distinct proof. In medicine, certain conditions of the patient are unknown, and hence absolute exactness is impossible. In mental and political science, unknown quantities reach their maximum. The element of uncertainty is greatest, and it is impossible to reach exactness. In these cases, complete knowledge is unattainable. Many laws of mental action are not understood. Results depend upon many causes which cannot be traced. The passions and the prejudices of men are factors of the highest importance, and, at the same time, the very ones least possible to discover. It, therefore, follows that researches which deal solely with men in their multiform characters are liable to the greatest and subtlest errors. If we regard contemporary events only, we discover our judgments are often highly erroneous because of our ignorance of motives and circumstances. When we turn to the past, the unknown quantity has

increased in proportion to the distance of the time and the incompleteness of its records. The chances of error are far greater. It is thus impossible for history to become an exact science.

Fortunately, however, we do not require absolute exactness from history in order to make it valuable, though its worth necessarily increases with the greater certainty of correct premises for our logic. Enough is known of human motives and character, and enough of the facts of all epochs of much importance to us, to enable us to reach generalizations of practical usefulness. In a department in which premises may be faulty and knowledge incomplete, it is the more important to have correct method. The results attained, when precautions are observed, possess a high value. They have long been, and still are, underestimated. Historical writing has, as a whole, made less advance than any kind of scientific record. It is more difficult; but it has not received the same attention and method. It is not now what it should be, nor what it is destined to become in the not distant future.

History has been treated as a record of events chronologically stated, and more or less connected, according to the ability or philosophical bent of the writer. Unity and perspective have rarely been preserved. Historical works have been compilations of facts whose salient features have been events which appealed to our passions or sentiments, rather than a record of progress. The result has been volumes which are statistical rather than philosophical, and which, in the final analysis, are nothing more than diffuse manuals. That such works cannot possess the high value which is intrinsically due to history, seems patent. That they have been the prime causes why history has not been an inevitable and invaluable part of all systems of education, and is not now held in the highest estimation, is obvious. Had historical writing reached that degree of perfection which it is slowly approaching, history would not, for so long a time, have been considered an educational ornament, rather than an educational necessity. It would not have received such cursory treatment in the schools as has been its lot; it would have been given other than the last and least important place in college curriculums, and, when taught, it would not have been in a perfunctory manner.

The prevalent idea of history has worked injury, because it has prevented it from assuming high rank in all courses of study. It has relegated it to an inferior place. It would seem unnecessary to offer any demonstration that a knowledge of the habits and deeds of men, and the result of their acts, would be of value in enabling us to foresee the result of actions of our own; but the course of educators of

all classes refutes the supposition. This principle is self-evident. The more perfectly a man knows what has happened in the past, and the reasons why all events have occurred, and understands what causes have produced certain results, the better able is he to see what will be the result of contemporary public or private action. The scientific study of history is the only means by which this can, in any measure, be done.

History may be defined to be a logical record of events showing how, through the irreversible sequence of cause and effect, every event of the past is the logical and only possible result of previous causes, which, in their turn, are the effects of causes previous to themselves. It is the study of humanity, at once the most difficult, profound, and exhaustive of all studies. The great errors which are characteristic of its past are lack of unity and perspective. It appears as if the fundamental historical conception had been absent, and, lacking this, groupings and arrangements have been illogical and arbitrary. Presupposing sufficient knowledge, the first requisite of an historic writer is a conception of the unity of his subject, so that it stands before him in its totality or completeness, representing definitely certain principles or ideas which its narration will exemplify. The second, and equally important requirement, is a mastery of the perspective of the work, so that events may receive their proper position, and every cause be so placed that its influence on the future, in determining results, may be grasped readily.

History other than American, and previous to the last few centuries, has dealt with periods of which comparatively little was known. Information has been chiefly legendary, and such data as existed have been incomplete. Logical reasoning can proceed only from well-defined conceptions. In the absence of exact knowledge such conceptions are impossible, and philosophical history, hence, cannot be written. Some few writers have attempted a strictly philosophical treatment, but they have generally failed, such failure being due to three causes; viz., imperfect conception, insufficient data, or the vastness of their tasks. It is evident that the longer a period selected, and the greater detail with which it is treated, the more difficult it is to preserve the thread of discourse, throwing into relief only determining causes, and preserving a grouping of the whole, which gives character and individuality to the epoch. It has been the custom of historians to deal with remote times. This course has been rendered necessary because man preserved no records of his actions until he acquired a good degree of civilization, and even then his first records were fragmentary and legendary. It thus became

the duty of historians to discover and reveal to civilized man the conditions and customs of his ancestors. With perfecting civilization and more complete knowledge of the past, the necessity for historians to devote themselves the more to distant times diminished. Events of more modern periods have been chronicled, though those which approached contemporaneous times have been carefully omitted, because human judgment is most likely to be correct when acting upon that which is so distant as not to effect us, if, at the same time, our knowledge is complete.

The facts of the past of which it has been easiest to learn have been those which were external and striking. The earliest history was heroic; the latest is constitutional. From the one to the other there has been a slow advance. The earliest history comes to us as legend, stories, and songs of popular heroes. Then come written accounts, first of individuals, then of nations. In all these the outward life alone is regarded. Details are of battles, and of the lives of princes and kings. There was, for long, no thought for the welfare of the people. This tendency was too powerful to be easily eradicated. Even now no historians venture to record a war by its salient features and results only. It is given with a detail which appeals to our heroic natures, and, by occupying time and attention far beyond what it deserves, judged by its results, it acquires a preëminence in our minds which cannot be justified by reason. In this method, great stress was laid upon facts themselves, while the irrelation and connection was overlooked. The result indicated no conception of unity, and showed no relationship of events. What perspective appeared was misplaced, for it brought into relief external and superficial affairs, and implied for them an importance wholly false. Contemporary historical writers are feeling the impulse of modern times. New methods are applied to historical work with promising results, and indications point to a better future.

Any historical work may be made valuable, though it deal with the externals of history, if unity and perspective are strictly preserved, because, if this be done, the sequence of cause and effect will appear. But the historian who deeply considers the unity of his subject will be led below the surface of events to meditate on active historical forces. He will then unconsciously discard that which is transient, and deal chiefly with developing causes. Study of the relationship of causes will lead to their perspective, or relative importance, and thus he will elaborate a scheme of history, which shows why that which has been has been, and which teaches invaluable lessons.

The value and importance of historical study has been greatly un-

derestimated by educators and by the public. In schools, generally, it has received less attention than any other study, and, when taught, it has been in the most perfunctory manner. Any teacher, however imperfect his own knowledge, is deemed able to take the book and hear a few dates recited, and a disjointed sentence or paragraph repeated from memory. One or two elementary works or primers are finished when the pupil is sixteen, and thus the majority of children are informed of what the world has done before them. If a college education is added, the student is likely to be taught Roman and Grecian history. Perhaps he gets a taste of Ancient or Modern, or a glimpse at French or English; and, if he be extremely fortunate, he has offered to him a course of study on the discovery and settlement of his own country. That he is taught anything concerning the vital history of the United States, the period of our individuality and national life is in the highest degree improbable. He learns by inference, if not by precept, that history is an educational ornament; and if he be not an exception to the average of men, nothing occurs in the future to change his early impression.

Of schools in the United States higher than primary, and including chiefly high schools, academies, and preparatory schools, eighty per cent. report that they teach United States history; seventy per cent. report that they teach general or universal history; forty-four per cent. teach English history; thirty-three per cent. teach Grecian and Roman history; and a much smaller proportion teach the history of other nations, among which that of France is most prominent. These figures represent what the schools *claim* to teach. Experience, however, shows that in very many schools there are no pupils pursuing certain studies. The teacher is able to teach them, and includes them in his announcements; but it often happens that classes are not formed. History is a study often treated in this way. At least five per cent. must be deducted on this account from the eighty per cent. of schools claiming to teach history. These figures, then, mean that twenty-five children out of every one hundred learn nothing of the history of their own country unless from cursory and fragmentary reading; that thirty-five out of every one hundred learn nothing of the general history of the world; that sixty-one out of every one hundred learn nothing of the history of England, from whence came most of our laws, customs, and institutions; and that seventy-two out of every one hundred learn nothing of the great nations of antiquity, Greece, and Rome. The figures represent facts, and facts which are of vital importance when considered in relation to Republican institutions. Were such figures representative of the condition of mon-

archical Europe, they would be highly creditable. Applied to Republican America, they are disgraceful. This difference is based wholly upon the difference in the form of government. In Europe government has always been by a few, and is still chiefly confined to a limited class. In America government is by the people, and depends entirely for its purity and efficacy upon the honesty and knowledge of the people. It therefore follows that, if any considerable portion of the people are ignorant, an element of danger to free institutions is present.

The twenty-five per cent. of children who are taught nothing of United States history does not represent the real ignorance of the people. The figures mean that twenty-five out of every one hundred of our *school-going* children, between perhaps thirteen and eighteen years of age, are taught no United States history. When the number of children who do not attend school after thirteen years, and the thousands of ignorant immigrants who never attend school, are considered, it is probable that at least thirty-five out of every one hundred learn absolutely nothing of the history of the United States. If it be then granted that sixty-five per cent. of our children are taught the history of their own country, it remains to be discovered what that history is that they are taught, and how it approaches that desideratum of compact and logical knowledge which alone possesses active and permanent value.

The necessity of education to the permanance of free institutions has found expression in the United States in the establishment of a free-school system, with the avowed object of training our children for citizenship. Such being the object in view, those studies which give information most practical and easily utilized are required. The primary grades are limited to the three elementary branches. In grades more advanced, the pupil is taught that which is to fit him for his life work. What he then requires is a knowledge of elementary principles and facts, and a knowledge of correct methods of applying them, that he may have a reasonable prospect of reaching correctness in his conclusions. At twenty-one, the pupil has to do with constitutional questions. He must weigh and consider matters of importance, and reach conclusions from broad generalizations. In this republic there is no aristocracy of educated men from which rulers are chosen. Legislators rise from all classes, often from the most ignorant. Passionate and vulgar men acquire prominence by their unscrupulousness, and half-educated demagogues lead in crazy schemes of inflation and repudiation. The sentiment of the Czar of Russia is beyond question,—absolute government must be exercised

by one or all; where one is absolute, the people require no learning,— he must be all-wise. Where the people are absolute, they require all learning,— they must be all-wise.

There has been discussion, of late, whether our school system has been the grand success it has appeared. That it has taught the bulk of the people to read and write is not denied; but whether it has accomplished its primary object, and formed good citizens, is seriously questioned. That it has failed, or fallen far short in this respect, seems evident when we consider the exhibition of ignorance and vulgarity which disgrace so many public men whose education has been gained only in the public school. Leaders are not worse or better than the people. An indifferent public sentiment produces incompetent public servants. A strict sentiment ensures a higher class. Public opinion has not yet recognized where the trouble lies. It devolves upon practical thinkers to point out the difficulties and suggest remedies.

It is not supposed that any representation that could be made, at the present time, would induce a discontinuance of the public schools, or any great modification of them. Nor would propositions looking to such an end be logical. On the contrary, before the public school system is discarded it should be brought to its most perfect development, and its utmost resources taxed, in order to secure from it satisfactory preparation for citizenship. The point here indicated, in which the present system fails, is the incomplete and inadequate teaching of history,— primarily of United States history. It has been shown that only about sixty-five out of every one hundred of our population have any knowledge of the history of our country. What the knowledge is which these sixty-five do possess will not be considered.

There are in print a considerable number of United States histories adapted to use in public schools and academies, in all nearly sixty. As elementary text-books, they serve their purpose creditably. Almost any one of them will answer for a child's first lessons, for it will give a brief and easy course in one entire history. Unfortunately, one of these books is esteemed sufficient for the study of our pupils, who are hurried through it, acquiring only a superficial view of facts, and nothing of causes and effects. In all other branches of study there exist graded courses, to carry the pupil from simple to complex thought. In history there is but a single grade of works, and those elementary. These books also suffer from a fault which greatly impairs their value, even as elementary works. Their treatment of the earlier and later periods of our history is wholly

without relation to their relative importance. There are three periods in American history. The first, of discovery and settlement, is between 1492 and 1630; the second, of active colonial life, is between 1630 and 1776; the third, of revolution and nationality, from 1776 onward. Of these periods, that which is of most practical value, as bearing upon existing forms and conditions, is the third. The second period ranks next, while the earliest is of least moment. Such being the fact, a judicious writer would devote most space to the time since 1776, and proportionately less to the earlier periods. As a matter of fact, this division has always been reversed, and three-fourths of each work is devoted to the first two periods, and but one-fourth to the last one. From such a division the pupil infers a greater importance for the earlier times, and attaches little importance to the latest. If these elementary works were followed by others more advanced and philosophical, there would then be less cause for censure. The second series would deal with the first period with comparative briefness; with the second, at more length; and with the third, with a fullness sufficient to develop it clearly. As now used, these works are wholly inadequate to accomplish successful results. They do accomplish, in the main, that at which they aim; but what they aim at is soinsignificant that to accomplish it deserves no very high praise. The sixty-five per cent. of the children who study United States history acquire from such works the disjointed knowledge of a few facts; they learn that such and such men lived and died; that there were wars and riots; but nothing more. There is not shown there a living sequence of cause and effect controlling events, nor any evolution of national life. No event of the past teaches a lesson to the future.

By such courses of study, interest in history is seldom awakened. When it is, the pupil is very likely to go wrong, and select superficial works in preference to more solid ones. Inquiries are more frequently made by persons desiring to read history judiciously, concerning the selection of books, than by those attempting to pursue any other study. Suggestions for courses of reading often appear, and elaborate works have been written to indicate what books should be read with different ends in view.

It has been shown that about sixty-five per cent. of our children are taught something of United States history,—a few facts and dates which are soon forgotten; which appear bald and isolated when learned, and being so, are totally barren of results. A few pupils continue their studies through college, and thus have further opportunities for historical study.

There are in the United States, in round numbers, four hundred so-called colleges and universities. Of these institutions not more than thirty deserve to be called colleges, and not more than five are worthy of the title of university. Of these four hundred higher institutions, only seventy-five per cent. claim to teach United States history; fifty per cent. general history, and thirty-three per cent. English, Greek, and Roman history. It is hence clear that even in our highest institutions there is a great lack of historical teaching On historical subjects generally, there are enough good and clear works adapted to the use of college students for text-books, or for reference in connection with lectures. But with United States history this is not the case. There is not a single book suitable for use as a text-book, and not a work of such a nature that it could be used without others for reading and reference. Three-fourths of the so-called colleges which teach history use the childish and elementary works already described. These institutions dwarf the intellect when they place such works in the hands of maturing young men. Such a course is disgraceful to education, and a reproach upon higher education. The remaining one-fourth do not pursue a much more creditable course. As there is not a United States history adapted to the use of college students, or which any well-informed person would presume to assert is suitable for them, there is no text-book used, and the subject is taught by lectures. These lectures generally relate to the settlement and colonization of the country, rarely coming down into this century. They close as their practical value begins. Effect is, however, produced in individual cases by stimulating the student to further work. A few institutions teach constitutional history. The course in such cases generally consists in the study of the English Constitution, by means of six or seven essays prepared by the student, on subjects given by the professor. These essays are discussed and criticized by the professor and class. Then follow four or five essays on United States history, treating of the settlement and early government of the country, and generally closing with the adoption of the Constitution. This course is good so far as it goes, but does not go far enough. It thus appears that the percentage of those who acquire a knowledge of American history is hardly augmented by those who pursue a college course. There are no data from which to deduce the number of those who ultimately acquire a good knowledge of the subject. It is probable, however, that it is less than five per cent. When college graduates of good standing acknowledge that they have never heard of Albert Gallatin, and do not know that there was ever a bitter struggle for the Constitution, one cannot wonder at the prevailing ignorance.

It is the fashion of to-day to turn toward historical studies, and ambitious colleges advertise courses in "History and Political Science." That such changes appear indicates a more healthful sentiment on the importance of political study, and likewise shows how disgracetul is the present condition. Did college courses give to history its true place, such a step would hardly be required. If the new courses are devoted exclusively to "History and Political Science," their products will be as unsymmetrical, in their way, as are the products of the now-historical courses. To-day, public opinion in America scoffs at scholarship. Americans are so confident in their strength, and in their ability to surmount all obstacles, that they do not heed any teaching. The masses do not generally believe that American history can be compared with that of any other people. Everything is supposed to be entirely new in this country, and not amenable to the laws which have controlled all others. There exists a scornful disregard of historical teachings, and a blind self-confidence. A complete misconception of the fundamental facts of the genesis of our national life obtains. A halo of glory surrounds the formation of the Constitution, into which few, even of the educated classes, have penetrated. It is believed that, after the Revolution, a constitution was quietly framed, and the government formed; political caucuses nominated candidates, and history moved serenely on. Nothing could be more erroneous than such a view. The country was on the verge of disunion and ruin before the people could be persuaded that a national government was needed. After the necessity was felt it required months to perfect the plan, and after it was perfected, nearly three years passed before all the thirteen States ratified the Constitution. The first two administrations of the new government were a formative period of great danger and difficulty, which, owing to the energy and ability of a few men, was passed in safely. Danger to the United States had by no means terminated with the close of the Revolution. The ten years succeeding it were fraught with the greatest peril Every influence was disintegrating. There was every probability of disunion and its inevitable consequence, a reversal of the result of the war.

Such being the facts stated in briefest outline, and such the common impression of them, it should be considered to what causes the erroneous impressions are traceable. Among them, three are readily discerned. They are: I. The self-confidence and self satisfaction of the masses; II. The failure of thinkers to grasp and utilize the facts of our history; III. The absence of such writings as would give the required information.

I. The self-assurance which characterizes Americans emanates,

in great measure, from their achievements, and is not wholly baseless; but it is too often of that arrogant nature which is not open to reason. It arises, also, in an equal measure, from ignorance of ourselves and of our country. Americans do not know what United States history has been since the Revolution; but attribute to it as grand and heroic a character as that which attaches to the Revolutionary epoch. Ignorance of the real condition of the country after the Revolution, of the severity of the struggle through which it passed up to 1800, and of the undercurrent of our constitutional struggle down to 1860, aids in producing self-assurance. Were all the facts understood, it would appear that Americans are of like passions as other men. Having early learned that their political conditions were better than those of other countries, and that this fact was due to the ability of their ancestors, they acquired a belief that they were superior to other men. This was nurtured and dwelt upon until, in time, it was transformed into inherent superiority; so to-day it is felt by most of our people that they are better and wiser than other people because they are Americans.

II. There has always existed in the United States a scholarly class, whose acquirements compared favorably with a similar class in England. But the turmoil of American life, and the necessity for all to struggle for competence, have prevented the meditation and research necessary for the accomplishment of valuable work. Very few of American thinkers have been able to devote themselves exclusively to scholarly pursuits. Necessity has compelled them to give their best efforts to obtain a livelihood. Only by encroaching upon the hours which should have been given to rest, have they accomplished that which was dearest to them. The men who first turned their thoughts to American history found an open field. They began with the earliest times, and moved slowly onward. Their course has been so slow, and their work so complete, that we have several works of great merit covering the period prior to the present century. Historians have felt that to enter this century was to encroach upon the present. They have, therefore, only touched upon it lightly. No attempt has been made in any work of importance to pass the year 1821, when the "era of good-feeling" was at its height.

Previous to 1861, the Constitution was still experimental. Though under it we appeared to have become a nation, our political history was a contest over its interpretation. If one principle of interpretation was sustained we would be proved a nation, — if the other, then our nationality might at any moment disappear. Rebellion was the test of the Constitution. The theory of Jefferson was destroyed,

and American nationality vindicated. The Constitution is not an experiment now in the sense that it was before the Rebellion. The period between 1800 and 1861 is now historical. The principle involved in the long contest has been settled. A new era is opening, in which social questions will stand side by side with constitutional ones, and, as the latter are definitely settled, will replace them. Prior to 1861 the same self-confidence which now exists characterized Americans. The government was thought too secure for rebellion to be possible. To-day no one deems possible a warfare on social questions,—a struggle between capital and labor. With the great lesson of sixty years so near us, nothing should be considered impossible. It is time to grasp the meaning of our history, and study its lessons.

III. American history has been made before all the world. There is no period of darkness for whose conditions we must allow upon legendary information. European civilization was well advanced, and English constitutional liberty had reached high development, before active colonization of America began. Every act of the new world was seen and recorded. All seemed so plain and clear that everyone must know it. When, at last, the struggle with England came, interest culminated in it. The Revolution was sufficient glory; the nineteenth century seemed too modern. History was being made,—it should not be recorded. The last sentiment possessed force until 1861, when the test of the Constitution came. The war settled the question of interpretation, and closed the epoch. It is time for a calm record of the first sixty years of this century to be made; they contain a deep significance to every American.

In a Republic, changes are so rapid that none can rely upon the apparent conservatism of any class. There is always clamor for something new, and there are always leaders for rash undertakings. With the settlement of Constitutional questions, social ones will take their place. A new struggle, and one never yet settled by any people, is urging itself upon us. The enormous inequality of wealth which our conditions present is not normal. It is highly probable that social questions will be settled in the United States. The greater elasticity of our institutions, and the free spirit of the people, make much possible which would be impossible in Europe. But before such results can be reached, the knowledge of the people and the culture of their leaders must reach a higher standard. Historical knowledge will be of chief value and, especially that of the United States, where already the greatest Constitutional questions of the world have been settled.

# THE UNIVERSITY; ITS PLACE AND WORK IN THE AMERICAN SYSTEM OF EDUCATION.

BY EDWD. T. TAPPAN, LL.D., GAMBIER, O.

It is assumed in the statement of the topic that there is a system of education in America, and that the University has a place and a work in that system. The determination of the place will not be difficult if we can distinguish what is the proper work of the University, wherein it differs from other educational works, and particularly from the works of the College.

This distinction must be between things rather than between names. The corporate name affords no information as to the character of a school; we know many legally named Universities which hardly rank higher than grammar schools, and whose best work consists in preparing students for college.[1]

The distinction between College and University does not consist in the power to confer degrees. Several States have been very loose in their legislation on this subject; they have vested in inferior schools the power to confer all kinds of academic degrees that ever have been conferred, and to invent new kinds, such as were unknown to our forefathers, and are wonderful to us. In consequence, academic degrees have become of little estimation.[2] Men who are known to be learned, sometimes prefer to drop the titles of Doctor and Professor

Every academic degree ought to be evidence of some work accomplished by the graduate. Degrees are of different rank. In order that they may be respected as evidence of work done, there should be

[1] This fallacy of looking at the name alone was made by a distinguished college president, in an address to the National Education Association, some years ago. By adroitly arguing upon names he instanced the number of so-called colleges and universities in Ohio, for the purpose of making a point in favor of institutions supported by the State. In fact, there are about fifteen colleges in Ohio. The managers of other schools bearing the name of college or of university know as well as we do that they are misnamed, but this does not prevent their doing excellent school work.

[2] Much of this talk about "honorary degrees" is merely superficial. There is far more abuse in the way degrees are conferred in regular course. The baccalaureate is frequently given at the close of a rather slender high-school course. There are thousands of Doctors that have received the degree in regular course, who could not pass the examination for admission to a respectable high-school. They can neither write good Latin nor speak good English. There may be some that have received the *honorary* degree of Doctor who are as ignorant as these; if so, they are comparatively rare.

definitions as precise as possible of the various grades of work in college and in university. Then the baccaulaureate might be regarded as the collegiate, and the magisterial or doctorate as the university degree. Let credit be given to those schools which are working in this direction.

The only essential distinction between college and university must consist in the work done. College work is confined mainly to liberal education. (The sins against education, under the guise of this word "liberal," have scarcely been surpassed by those against human rights under the guise of liberty.)

The study of the liberal arts,— *honestarum artium cultus*, in which Agricola passed his boyhood and youth,— has these objects: to discipline the intellect in acquiring, preserving, increasing, and imparting knowledge; to free the mind from prejudice, to sharpen it for the detection of error, and to purify it for the reception of truth. A liberal course of study, however much it may vary from age to age,—and it must vary as the world makes progress,—always must have these ends. There should be some study of natural science; the eye must be taught to see, the ear to hear, the fingers to touch, and the soul to recognize the glorious apparel of nature and the sweet and solemn tones of her voice; the faculty of observation must be trained, so that law may be recognized as something else than chaos. There should be some study of pure mathematics, training the mind to exact thought expressed in exact words, and giving the soul an opportunity to bathe itself in knowledge that is absolutely pure,—a science in which the rules have no exceptions. There should be some study of man, his relations to nature, to his fellow-men, and to his Creator; his history, his past, his present, and his future. Then, preceding all these studies, and accompanying all and crowning all, there must be the study of language, which is the vehicle of all thought, the record of all knowledge, the ornament of every science, the salvation of every art.

Contrasted with the liberal is the useful course of study, which is to prepare men to be of use to their fellow-beings. Not but that the liberal education is useful in every sense of the word, but its immediate effects are in the good of the student; it is to him an end. Hence the contrast with other studies whose *sole* object is to prepare men to do good to others. The liberal education does this by first creating the power to labor; the useful courses are to furnish the special knowledge which constitutes the tools. Formerly there were three principal courses, having for their objects the healing of disease, the administration of justice, and the cure of souls; but in these days,

nature is pursued with untiring energy, and her every force is made to serve her lord and master, man; and the courses of useful study are as various as the needs of humanity. Such studies belong to the university. They are properly termed useful. Every one of them is a means to some good end.

While the distinction between liberal and useful studies is clear, yet some studies partake of both characters. There comes into the lower schools much that is intended to be used in professional or other work; and there are always in the university many students who are pursuing either the classics or the sciences for the pure love of knowledge. Nevertheless, the essential difference between liberal and useful remains, and must remain as long as education is a science. This distinction nearly divides the college from the university work. The college education is almost exclusively liberal. The university education, in addition to the philosophical course which consists of liberal studies, includes all professional studies, all the sciences.

In the university work, courses of study are elective. Since every student may be assumed to be gaining knowledge for a particular kind of useful labor, election is necessary. When this general truth is taken as a premise from which to infer the simple converse, the argument is fallacious. It does not follow that a school which allows entire freedom in the election of courses of study is necessarily a university. The proposition is not stated in that plain way,— sophistry is not usually clothed in simple attire,— but some teachers appear to believe in their hearts that freedom in the election of studies goes a great way toward making a university.

Some have gone to the opposite extreme, and hold that in the college course there must be no election of studies. Without admitting this, the discussion of which would be aside from the subject, too much freedom of election, as allowed in some schools, is destructive of right liberal education, without which no one ought to enter a university. A liberal education ought to include the four elements above stated,— nature, mathematics, man and his work, and language. To allow a selection which omits either one of these, makes a course which is not general but one-sided. Such an education is not liberal but contracted. Ordinarily that particular department of study which a student deserts is that which he most needs. With no adequate general preparation, he wishes to pursue a course which he thinks will be useful in his future business or favorite science. If such a man is indulged, he is apt to be a failure, narrow. For the sake of all true education, university studies, including elective courses preparing for future business, ought to be preceded by a broad liberal

course. As some of the better colleges have courses, the last year of which is part university work, free election of studies in that year may be proper.

There is now in this country a great deal of university work; much is done in colleges, and much by the better professional schools. Those professional schools which admit students with no adequate general or liberal education, can hardly be said to be doing anything fit to be named in a classification of schools. Also those few great schools where original research is made in order to increase knowledge among men, are doing university work.

In view of these facts, the question arises: Is it desirable to in crease the number of distinct universities, institutions which do true-university work, and that alone? If it is desirable, then what can be done toward that end?

The opinion is gaining, that the general or liberal educational work and the professional or special educational work would both be benefited by a separation. This may be effected either by a separation of schools, or by some line of demarcation if both university and college work are done in one school. Whenever this is done, there should be a corresponding graduation, the baccalaureate degree for the college course, and the degree of Master or Doctor for a certain amount of university work. Within the last thirty years great additions have been made to the regular course in many colleges. This increase of scientific and classical study has not hastened the organization of distinct universities. Many of these colleges which do some university work are so situated that they cannot afford to give up either the beginning or the end of the course, and there is no reason to expect any such action. If those colleges where the general education is less than the whole course would separate the liberal or college from the university course, and give the baccalaureate degree to the former, it would be a step toward the separation of things which are in their nature different. This, however, is only a matter of organization, and not the essence of a university.

In order that good university work may exist, two things are essential,— teachers and students.

The teachers must be among the most eminent in the world in their several branches of knowledge. The number of such men in this country is not great, in proportion to our population, but it has increased of late years. A sufficient supply of such men is the first essential of good university work.

The rule to be followed in keeping up a college faculty differs from that which should govern in the university. In the college, the fac-

ulty must be full enough to teach all the branches of the course, for the college course fails if any essential part is omitted. It may be proper to select a college professor, the best that can be obtained at the time, and regard may be had as well to his skill in teaching as to his scholarship and scientific acquirements. In the university, on the other hand, only those should have a place in the corps of teachers who are eminent in their departments. A university should not attempt to teach all things. No one school can do that well. Better that the professor's chair in the *university* remain vacant than that it be occupied by even a second-rate man. Some schools are too hasty in their ambition to be universities. We laugh at the ridiculous bombastic college at Monohyppos, where one man does all the work of a full faculty,— but this is no more absurd than the university at Polyhyppos, which proposes to give thorough instruction in all the sciences, and in all the art and literature of ancient and modern times by the same team of professors who are engaged in hauling a body of under-graduates through, or over, the general college course.

The other essential for the existence of good university work is students,— real students. The student prepared by the liberal course of study must add to this a desire to master the professional or other course which he enters upon at the university. The number of students in this country who have this preparation and this wish seems to be quite limited,— but it does grow; there is a constantly increasing number who aim to become masters of their science. They cannot be satisfied by merely passing an examination. There is also an increase in the number of those who are studying ancient or modern classics, with a thoroughness that was rarely attempted thirty years ago. The number who go to Europe to pursue their studies in the great schools of science or art is increasing year by year.

All signs show that university work in this country must increase within the near future. Where the great schools will be located, whether the advance will be in the old schools that have done so much already, whether newer institutions may surpass any that now exist,— these are less important questions. The important thing is to recognize what must be the work of the university. If we can apprehend this definitely, we can help by removing some obstacles.

## CHAIRS OF PEDAGOGICS.

REPORT OF COMMITTEE ON CHAIRS OF PEDAGOGICS IN COLLEGES AND UNIVERSITIES; WILLIAM T. HARRIS, *Chairman.*

*To the National Council of Education:*

Your committee beg leave to offer the following report touching the establishment of Chairs of Pedagogy in Colleges and Universities.

They would respectfully represent that while instruction in the history and philosophy of education,—called Pedagogics,—has been given successfully for many years in the Normal Schools established in the several States of this Nation, and a large number of professional teachers have been sent out into the elementary schools of the land from these institutions,—that, on the other hand, the colleges and universities of the country have, with few exceptions, furnished no instruction in these matters.

Your committee would further represent that, as a consequence of this neglect, the teachers who give the secondary and higher education in this country have generally come to their work without professional training and without a philosophical survey of the science and art of education.

Your committee would further represent that the educated directive power of the country, as it is found in its professional men,—the clergy, the lawyers, the physicians,—has by far the greater influence in the control and management of elementary education, as well as of higher education; and that an ignorance of the history and philosophy of education leads to many wasteful experiments and wrong tendencies, and often results in factious opposition to the best interests of the common-school system in the country.

Your committee would refer to the same cause the conflict existing in the system of higher education with regard to the course of study, —between the advocates of a strict adherence to the disciplinary studies—Latin, Greek, and the mathematics on the one hand—and the advocates of the natural sciences, modern languages, literature, and history, on the other hand. The true functions of these branches not being well defined, by reason of the fact that there is no profession whose business it is to investigate the question of course of study, it happens that the advocates of information-studies, or "modern" branches, show a tendency to neglect the classic languages and mathematics, and by this fact slight those studies which

give the pupil insight into the forms and usages of modern civilization, which show him their genesis in Greek and Roman life, and which give him ability to analyze the manners and customs of his own time and see their presuppositions. It happens, too, that many of our best institutions are led to make modifications tending toward the union of disciplinary and information-studies, but often with quite unsatisfactory results; the information-study being mistaken for an equivalent instead of a supplement to the disciplinary study. Meanwhile, a great number of the higher institutions adhere to a course of study which makes little account of the chief developments, in modern times, in the fields of literature and natural science, and which clings tenaciously to a course of study in Latin, Greek, and mathematics without requiring a proper quota of information-studies with these disciplinary studies. The course of study in such colleges and universities accordingly makes slight account of the studies of common schools in its requirements for admission, and demands special preparatory schools with a narrow course of study; it postpones the conventional studies that furnish information regarding the modern world of nature and man; for example, it postpones English literature and general history and the sciences of nature until after the pil has spent from eight to twelve years upon such purely disciplinary studies as pure mathematics, and the life and language of the Greeks and Romans. A course of study carried for so long a time in these branches results in a deep estrangement from the practical world of the present, and partially destroys the disciplinary value of those studies by depriving them of application. This lack of harmony between the higher education and the common-school education your committee would refer to the fact that our colleges and universities do not give sufficient attention to the subject of pedagogy, practically and theoretically.

Your committee would suggest that the history and philosophy of education should not occupy the place of a disciplinary study in college, but that it is quite sufficient if the classes of the last two years of the course receive instruction for a few weeks each year in the science and history of education; the object being gained when correct views are inculcated as to the scope and importance of pedagogics, and the students come to see the possibility of overcoming, by means of correct methods, the difficulties that arise in school.

Your committee would therefore express their satisfaction at the recent movement toward the establishment of chairs of pedagogics in colleges and universities, believing that great benefits are likely to result,—first, in improved methods of instruction and discipline in higher education; secondly, in the more intelligent direction of com-

mon schools through the influence of professional men appointed on school committees; and thirdly, in a revision of the course of study that will make elementary and higher education two members correlated in one harmonious system.

Your committee see in this study of pedagogy in colleges and universities not only a resulting harmony between elementary and advanced education, but also the clearer definition of the province of the school as one province of education having a special purpose, coördinated with four other forms of education pertaining to, and peculiar to, the four great human institutions: the family, the social community, the state, the church. Without this clear definition of provinces there arises a constant tendency to make one form of education encroach on the province of another, or responsible for its results; and your committee are of the opinion that the study of education as a science and art in our universities will result in a careful consideration of the limits of the course of study and training in the school, and throw light on the educative character of the cardinal institutions of society here named, so as to discover what education, if any, belongs exclusively to any one of them, and cannot be undertaken by the school without wasting its forces in a vain attempt to perform functions that belong to other institutions; perhaps also relieving the school of the odium that attaches to it in some minds, because it does not remove the evils of society, and, besides this, destroying the empty conceit of school managers that the school is the only institution that educates.

Your committee regard these general studies in pedagogy as important to all the students of colleges and universities, inasmuch as American citizenship makes constant demands upon the individual for a knowledge of educational principles in his capacity of parent, or as voter, or public officer in the management of schools. All correct legislation in school matters and all correct administration of schools imply a correct knowledge of the proper scope of the labors of the school, as well as of the proper subordination of primary to advanced schools.

Your committee believe these considerations regarding the general bearing of education and its several instrumentalities to be a legitimate part of the higher education of all young men and young women in this Nation; and that some general instruction in this important matter should be given to all pupils, while more specific education in the practical methods of teaching should be furnished to all who propose to enter the profession of teaching.

Respectfully submitted: W. T. HARRIS,
E. C. HEWETT,
Members of Committee present.

I append the communications received from the other members of my committee, partly confirming and partly supplementing its conclusions :

From Mrs. Grace Bibb-Sudborough, Professor of the Science and Art of Education in the State University of Missouri :

"I cannot attend the meeting at Saratoga. I indorse the Atlanta Report as submitted."

From E. C. Hewett, President of Normal University, of Normal, Illinois :

"I fully concur in all your report says; but I send herewith a paper presenting my views upon two or three additional points, which I ask you to incorporate, or to present as coming from me, as you choose.

1. Another argument for the study of pedagogy in our colleges and universities is this: As matters now are, it very frequently happens that men from the colleges without any professional study or training are placed as superintendents and principals to direct the teaching by young women and men who, in normal schools and elsewhere, have become well versed in a true pedagogy, at least in its more practical phases. Thus the master, although superior to his assistants in general knowledge and culture, is found to be decidedly inferior to them in technical and professional knowledge pertaining to the work in which they are engaged. Such an anomaly is the occasion of much harm and heart-burning, and it should be remedied.

2. The occupants of Chairs of Pedagogy in our higher institutions should do very much to formulate and promulgate the principles of a true science of education, in such a form as will be acceptable to all right thinkers on the subject, and in such a way as shall impress itself on the community in general. It is generally agreed by intelligent men that there is such a thing as a science of education; but exactly what it is, what are its principles, what their logical relation, what their proper form of statement, it is not easy to say. Here is work for the occupants of higher Chairs of Pedagogy.

3. It should not be understood that the teaching of pedagogy in our higher institutions is to supersede or interfere with the professional work now done in our normal and training-schools; it is, or ought to be, work in another branch of the subject; its field should be distinct, as its pupils will be. Its only proper effect in modification of what is now done should be that modification which always follows when lower levels are visited by pure streams of truth flowing down from higher."

From Hon. M. A. Newell, Superintendent of Public Instruction of the State of Maryland, and Principal of the State Normal School :

"I do not think I shall make any report on 'Chairs of Pedagogy.' Indeed, a careful reading of your report brings me much nearer to your views than I thought possible. But I will give the subject still more reflection, and if I reach any important conclusion different from yours, I will put it, and the reasons, on paper."

From Edward S. Joynes, Professor in the University of South Carolina :

"I concur fully in every principle and every point of your report,—so fully that I need add nothing in the same direction. My own experience,—having come to the work of teaching in early life without pedagogical training, and working my way to it slowly,

through experiment, mistake, and self-correction, often with loss of time, temper, and opportunity,—has convinced me profoundly of the value of such preliminary training for all who would be teachers. You have heard me say, I think, that such training puts a young teacher into possession of those results of experience,—philosophy founded on experiment and on human nature,—which otherwise he must slowly attain, often at the cost of the best years of his life. But this point lies outside of the practical object of your report. With deference to it, without recurring to its general argument, I venture to add a practical suggestion:

Granting, as I do, all that the report claims, there yet remains the fact that but a few of our colleges or universities would now be able,—or if able, ready and willing,—to establish the special Chair of Pedagogics. They will not see their interest in it. I have tried the argument here and elsewhere, and have met the response,—short-sighted, indeed, but very plausible with such persons as usually constitute the governing boards,—that pedagogics is intended for only a limited professional class; *i. e.*, for teachers only, and so has no claim to be made part of general education. It will be a long time, I regret to assure you, before the great majority of trustees, and even of faculties, can be brought to see any deeper or any farther than this. Hence the question is, What is the best that can be done for the present, as preliminary to better things hereafter? and I have found for myself this answer:

Let us urge, wherever such chair cannot be fully established, that the subject at least be comprehended in some one of the existing chairs. The chair of Mental and Moral Philosophy exists in all colleges, and in most cases is filled by men of leading ability, who now have but little class-work to do, and this mainly in higher classes. Let us aim to make this, wherever possible, the chair of Mental and Moral Philosophy and Pedagogics, which, I take it, is really adding nothing new to the proper scope of the chair; for pedagogics is mental and moral philosophy,—the philosophy of man, applied in its highest sphere, that of education,—but this will make it the duty of that professor to give special attention and study to this subject,—to introduce a course of reading and lectures upon it; perhaps to call in the aid of experts, now and then, to give lectures to his classes on special topics.

Soon, then, I am sure, the importance and interest of the subject will be so felt by teacher and by students, that the faculty and trustees will have their attention aroused; a public demand will make itself felt for larger development of the subject; and thus I believe, in many cases, the professorship will come of itself in a short time, if only such beginning can be made."

I have quoted the words of Professor Joynes in order to present his view in the most direct and pointed manner possible. I indorse his plan heartily, and believe that it is the true practical way and manner to proceed to put in operation the new branch of study.

WM. T. HARRIS,
*Chairman of Committee.*

# *THE HIGH SCHOOL:*

## ITS NECESSITY AND RIGHT TO EXIST AS A PART OF THE TRUE SYSTEM OF PUBLIC EDUCATION.

BY J. L. PICKARD, LL.D., PRESIDENT STATE UNIVERSITY, IOWA.

By public education is meant, education provided at public cost, and its system administered by public officials.

The system thus supported and administered is styled, almost universally, THE SYSTEM OF COMMON SCHOOLS. This system has become the subject of gradation, — its subdivisions varying in number and terminology in different sections of the United States, and sometimes in different parts of the same State; but a very generally accepted division is easily recognized in *Elementary Schools and High Schools.* The former have for their special province instruction in the rudiments of an education, and the latter enter upon a broader and higher field. Both are but parts of a symmetrical unity. All admit the right of the elementary part to public support. Some deny the right of the State to support at public cost the high-school part.

Taxation, say the opponents of higher education, can be resorted to only in the service of a public good. Then premising that only the simplest elementary education is a public good, the conclusion is easily reached that all taxation for high schools is in direct contravention of the Constitution, and cannot be for a moment maintained. Still further is the argument pressed that the few who alone can receive the benefit of the higher education should not be favored at the public expense. If the premises are correct, then is the reasoning sound. But are they correct? Who are better prepared to answer than the fathers of the Republic?

"A system of general education which shall reach every description of our citizens from the richest to the poorest; as it was with the *earliest*, so it shall be with the *latest*, of all the concerns in which I shall permit myself to take an interest."—JEFFERSON.

"If a nation expects to be ignorant and free in a state of civilization, it expects what never was and never will be. The functionaries of every government have propensities to command at will the liberty and property of their constituents. There is no safe depository for these but with the people themselves; nor can they be safe there without information."—JEFFERSON: *Letter to Colonel Yancey, Jan.* 1, 1816.

"The object is to bring into action that mass of talents which lies buried in poverty in every country for want of the means of development, and thus give activity to a mass of mind which, in proportion to our population, shall be the double or treble of what it is in most countries."—JEFFERSON: *Letter to Correa, Nov.* 25, 1817.

"Classical languages are a solid basis for most, and an ornament to all, the sciences."—JEFFERSON: *Notes on Virginia.*

"To read the Latin and Greek authors in their original is a sublime luxury; and I deem luxury in science to be at least as justifiable as in architecture, painting, gardening, or the other arts. I thank, on my knees, him who directed my early education for having put into my possession this rich source of delight, and I would not exchange it for anything which I could then have acquired and have not since acquired."—JEFFERSON: *Letter to Dr. Priestly, Jan.* 27, 1800.

"While you keep the great end of education in view; *i. e.*, to enable men and incline them to be more useful to mankind in general and to their own country in particular, and at the same time to render their own life more happy,—you cannot be in danger of taking wrong steps, while all of them tend to that end."—CADWALLADER COLDEN: *Letter to Franklin, Nov.*, 1749.

"And though the culture bestowed on the *many* should be successful only with the *few*, yet the influence of those few and the service in their power may be very great. Even a single woman that was wise, by her wisdom, saved the city."—FRANKLIN: *Letter to Samuel Johnson, Aug.* 23, 1750.

"In proportion as the structure of a government gives force to public opinion, it is essential that public opinion be enlightened. Promote, as an object of primary importance, institutions for the diffusion of knowledge."—WASHINGTON: *Farewell Address.*

The individual expressions thus far quoted are found to be types of the enlightened public sentiment of the earlier days of our history. We find in it the constitutions and laws framed and adopted by the most thoughtful men of the times.

The term "Common Schools" appears quite largely in all. We search Worcester and Webster in vain for a *limiting* definition. Nor does the Law Dictionary give us any light. Failing to find a definition in *words*, we must look to *practice*. But practice has materially changed during the past thirty years, hence we will confine ourselves to the earlier constitutions and laws, and to the practices under them.

The Constitution of Connecticut of 1818 names "Public or Common schools, and for the equal benefit of all the people of the State." The Legislature, acting under this Constitution, in 1841 gave to school districts the power "to establish and maintain common schools of *different grades*."

The Constitution of Massachusetts reads thus: "It shall be the duty of legislatures to cherish the interests of literature, etc.,—especially the University at Cambridge, public schools, and grammar schools in the towns." The last provision continues in force an act of nearly two centuries earlier, by which the people were required to provide for higher education in proportion as their population increased, and we find distinct enunciation of the requirements in a statute of 1826. It required schools to be established wherever fifty families were found, in which should be taught all the lower English branches; for every five hundred families a school should be opened

for instruction in additional branches of history, bookkeeping, surveying, geometry, and algebra; and for every four thousand inhabants in any one town a still higher grade should be established for instruction in Latin, Greek, history, rhetoric, and logic. The same statute provides that any town having less than five hundred families may provide for instruction in higher branches. The question of ability to meet the requisite taxation evidently lies at the bottom of the classification by numbers of inhabitants. New York made no specification as to branches to be taught, but in her common schools facilities were afforded for instruction in higher branches. It may be said that her schools were not entirely free, but this does not affect the question considered; viz., the signification of "*Common Schools.*"

The first Constitution of Ohio says: "The doors of the said schools (public schools), academies, and universities shall be open for the reception of scholars, students, and teachers of *every grade*, without any distinction or preference whatever." The statutes of 1837 contain the following provision: "Directors may determine the studies to be pursued in each school, so that reading, writing, and arithmetic shall be taught in the English language; *provided*, that nothing in this act shall be so construed as to prevent any other language in *addition* to the English from being taught in the common schools at the discretion of the directors. Incorporated towns, cities, and boroughs may establish schools of different grades."

Similar provisions are found in the statutes of nearly all the States, which, at the time considered, had school systems. They require uniformity, but it is a uniformity of *possibilities* rather than of *actualities*.

I think it will be clear that in the earlier legislation to which we are referred so constantly by the advocates of a *limited* common school, there will be found no warrant for confining the work of schools, supported by the people, to the simplest rudiments of an English education.

But perhaps legislators exceeded their authority. There is a tribunal established for the purpose of determining this question. Let us turn, then, to Supreme Court decisions in the continuation of this argument.

Very few decisions appear upon a full investigation of all the reports of the United States. These few are, without exception, directly or indirectly favorable to the higher education at public cost.

My first reference is to Tyng's Mass. Reports, Vol. 16, page 141: Commonwealth *vs.* Town of Dedham. The indictment found in the lower court recites:

"The jurors on their oath present that the town of Dedham, in the county of Norfolk, at said Dedham, on the 26th day of April, 1816, and from that

time to the 26th day of April, 1817, did contain, and still doth contain, two hundred families and upward; and that said town of Dedham, at said town of Dedham, did during all the time from said 26th day of April, 1816, to said 26th day of April, 1817, neglect, and still does neglect, the procuring and supporting of a grammar school master, of good morals and well instructed in the Latin, Greek, and English languages, to instruct children and youth in such languages, which is in subversion of knowledge and in hindrance of that promotion of education which the principles of a free government require, and which the Constitution of the Commonwealth enjoins, and against the peace and dignity of said Commonwealth, and the forms of the statutes in such case made and provided."

The Supreme Court sustained the finding of the lower Court. The decision of the Supreme Court enunciates the principle that "every inhabitant had the right to participate in both descriptions of schools."

It will be observed that the indictment rests upon the town of Dedham in its corporate capacity. The town could not procure and support a grammar [high ?] schoolmaster except at public expense.

My second reference is to Metcalf's Reports, Mass., Vol. 10, page 508: J. N. Cushing *vs.* Newburyport,—suit brought to restrain the collection of a tax for support of a high school.

*Illinois Reports, Vol.* 79, *page* 567*: Rulison vs. Post.*

"In the agreed statement of facts, it appears to the Court that the schools established by the town of Newburyport, though extending to instruction in branches of knowledge beyond those required by the statutes, were yet *town schools*, within the proper meaning of that term, provided for the benefit of all the inhabitants; that the taxes levied for the support of them, in common with other town charges, were not illegal," etc. "As it cannot be presumed that they (the towns) have purposely acted in violation of the law, they must have acted on the assumption that, as the true construction of the statute, though they were bound to raise the sum for schools to the amount specified, they were not restrained from raising more."

"We are therefore clearly of opinion the General Assembly has invested school directors with the power to compel the teaching of other and higher branches than those enumerated to those willing to receive instruction therein, but have left it purely optional with parents and guardians whether the children under their charge shall study such branches.

The case cited arose from the attempt made by a teacher to compel the daughter of the plaintiff to study a branch (book-keeping) not named in the statute.

The most recent decision is that of the Supreme Court of Illinois (1880) in the case of Powell *et al. vs.* Board of Education of School

District No. 4; T. 7, N. R. 9 W., St. Clair Co., Illinois. The case rested upon the right to require the study of German in the public schools. The Court says:

30 *Mich., 8th of Post, page 69: Stuart vs. School Dist. No. 1 of Kalamazoo.*

"The mere fact that the German language is one of the branches taught does not change its character as an English school. An English school is one in which the medium of instruction is the English language. German is permitted, unless specially inhibited."

After reciting the facts pertaining to legislation down to 1850, the Court says:

"If these facts do not demonstrate clearly and conclusively a general State policy, beginning in 1817 and continuing until after the adoption of the present Constitution, in the direction of free schools, in which education, and, at their option, the elements of classical education migh be brought within the reach of all the children of the State, then, as it seems to us, othing can demonstrate it. . . . We content ourselves with this statement, that neither in our State policy, in our Constitution, nor in our laws, do we find the primary school districts restricted in the branches of knowledge which their officers may cause to be taught, or the grade of instruction that may be given, if their voters consent in regular form to bear the expense and raise the taxes for the purpose."

I have not been able to find any other decisions bearing upon this question. These cited fully sustain the right to include in courses of study for our common schools other and higher branches than those purely elementary. It may be noted that nowhere in the citations made, except the last, is the term "high school" used. It was so obviously a part of the common-school system as to need no special designation. The name came into use with the more modern gradation of schools, accompanying the division of labor in our industrial world. The principle had existed, and the work had been done under the name of *Common Schools*, before gradation was established. No new *thing* is introduced, but a new *name*. Change of name cannot certainly take away the *right to exist*. The right of that part of the system,—usually named High Schools,—to exist seems clear.

Turning to another point in the argument,—the relation of our common schools to our social and political systems,—I would introduce the words of an intelligent French observer, deputed by his government to inspect the schools of the United States. M. Buisson, in a report to the French Government detailing the results of his careful study of the common schools of the United States, thus speaks of the high school:

"In other countries it is to be feared that the children of different classes of society, although they may be brought together for a time in the public school, will very soon be found separated as widely as are their families in the social scale. In America everything is done to retard and to reduce the degree of that separation, by carrying as far and as high as possible that common instruction which effaces all distinction between the rich and the poor. Thus do the two degrees of the public school render the State diverse but equally important service. The one gives to it an entire population knowing how to read and write; the other draws from this mass a select few whom it endows with an intellectual capital sufficient to pay a hundred times its cost. How is this selection made? By favor of public liberality, which is a burden to none, thousands of children, — the best, the most gifted, the most highly educated, the best fitted for labor, the best prepared for the battle of life both by the examples of their parents and by their own struggles, — come out of the mass of the poor, perhaps indigent, population where, otherwise, they would remain undistinguished, and year by year infuse new life into the middle classes. If it be true that the prosperity of a republic is in direct ratio to the renewal of these middle classes, to the abundance and facility of their indefinite recruiting, then the high school of the United States, whatever it may cost, is the best investment which can be made of national capital."

This intelligent presentation is certainly free from all bias. Upon the benefit to the State from the elevation of the middle classes, from the possibilities opened to the poor, from the removal of all caste distinctions, from the feeling of independence which accompanies the gift in the mind of the recipient, from the claim for service which the State thus insures, rests a strong argument in favor of the high school.

The principle that obtains in all physical science, that the strength of any structure is only equal to that of its weakest part, will not be found inapplicable to political organizations. The weakness of our Republic will be found in the want of intelligence in the citizens. The high school properly conducted is a source of strength, and on this account has a right to exist. Every child in the lower schools feels the influence of the higher, and in striving after that which may be only a possibility to him, he enlarges and strengthens his actual attainments. For its indirect influence it has a right to exist. The right to existence does not imply the right to complete absorption of public interest, nor to undue prominence in public regard. It is but a part of a system neither more nor less valuable than any other part, higher in position only, as the branches are above the roots of the tree, dependent upo nnourishment drawn from the soil, and depended upon for nourishment drawn from the atmosphere.

## THE HIGH SCHOOL: ITS RELATION TO THE LOWER GRADES OF PUBLIC SCHOOLS.

BY JOHN HANCOCK, PH.D., DAYTON, OHIO.

No school-system can effectually meet the object of its creation which does not embrace in its constitution provisions for carrying the education of youth beyond the common branches. With one hand the high school beckons the pupils of the elementary schools to come upward to its more elevated outlook, and with the other it points its own students to the still higher outlook of the college. Lacking the high school, the pupil of the lower schools would lose a chief incentive to exertion. Build in front of him at the very start of his career an impenetrable wall, barring all future progress, and the motive to activity is gone. His life at once begins to shape itself to lower aims, and he grows content to be a small creature. On the other hand, with a good high school to crown the public-school system, there is provided for every child, even the youngest, a potent and ever-acting incentive to push forward. Each promotion in grade comes to be regarded as but another step in the upward march to the high school. Of course the larger number of pupils fall out by the way, but most will have climbed higher, and have done their work better, from having had their eyes fixed on this goal. The atmosphere of a generous equality comes to pervade the community, and the poorest and most neglected child is led to feel that there is something in the world for him to do which shall be well worth the doing.

The course of study, too, for the lower schools is certain to feel the influence of the high school. This course is too often afflicted with a fearful leanness,—built on the principle that the three R's and but little of them, are sufficient to meet all the educational needs of common people. In forming a curriculum for the lower schools, the liberal spirit begotten of the high school is sure to furnish here and there a new element,—a germ of growth which shall develop with the advancing civilization and culture of the community,—nay, rather shall be the chief cause of this advance in civilization and culture. In other words, the course of study for the elementary schools, instead of being a meager, dead stalk, becomes a living growth, full of sap and vigor.

But perhaps the influence of the high school upon the lower schools

is exerted most powerfully in providing for them a class of teachers of a higher grade of qualifications than it was possible to secure under the former order of things. No argument is needed to show the utter vanity of all schemes of public education which at the same time fail to place a competent teacher in every school. The high school cannot give us professionally-trained teachers,—the supplementary work of the normal school is required for that,—but it does give us teachers whose views have been broadened and love of knowledge deepened by some taste of a liberal culture. Nor is this taste so slight as some might be inclined to think; for it should be remembered that the high school of to-day, as constituted in most of our large towns and cities, gives a better education in the sum-total, than did the average New England college fifty years ago.

And this higher education of teachers as a class renders possible the successful introduction into the lower schools,—especially into the primary departments,—of those improved methods of instruction which have lifted teaching from something less than an empiric art to the level of a science, and are doing more than any other agency to make knowledge loved by the whole people. Without the character-training and resources which come to our teachers from a high-school education, these methods would prove an utter failure, or degenerate into a mechanism more lifeless than the worst mechanism of the dreadful past; for it may be stated as an educational axiom, that intelligent methods can be applied by intelligent teachers only. Machine methods are necessary wherever machine-teachers are found.

## THE RELATION OF THE HIGH SCHOOL TO BUSINESS-LIFE: WITH THE TRUE COURSE OF STUDIES.

BY WILLIAM A. MOWRY, PH.D., PROVIDENCE, R. I.

It will be necessary at the outset to define Education. The term may be used in two significations: first, in referring to the act or process; and secondly, in referring to the result of this process. Its particular use in this paper is with the first meaning. Education is the process of developing and training the powers and capacities of human beings. Education should achieve these results: "to lead men to know, to do, and to become." "The first step in human development is the acquiring of knowledge." The second is "the discipline, culture, and training of the several faculties." Again, "the *kind* of power a man shall wield is even more important than the degree." It is clearly evident that education goes beyond the mere acquisition of knowledge. To learn to read, write, and cypher, to demonstrate propositions in geometry, to solve problems in algebra, or to acquire a knowledge of the laws and principles of physics or chemistry, does not constitute the whole process of education. Neither does education consist in learning a trade, by which the daily bread is to be earned. But education means, according to Webster, "the leading out and training the mental powers;" "the informing and enlightening the understanding;" "the forming and regulating the principles and character;" "the preparing and fitting for any calling or business, or for activity and usefulness in life." "Education is properly to draw forth, and implies not so much the communication of knowledge as the discipline of the intellect, the establishment of the principles, and the regulation of the heart."

These distinctions, in the nature and scope of education, are essential to a correct apprehension of the relations of the high school to business-life, and aid us materially in determining the true course of studies. To educate the human race is, then, to develop humanity: to cause the physical, mental, and moral powers of man to grow, to deepen, to broaden, and to strengthen; *and*, also, it is to bring all these increased powers and capacities within the complete control of the man, to give him a broader scope, a higher reach, a stronger grasp. It therefore follows that the schools should not teach trades; but that they may teach the principles which underlie all trades, especially

the cultivation of the mind through the hand and the eye; not teach to peg or sew a shoe, thereby to earn a livelihood; but the power of the shoemaker shall be so increased by education as to make him a better shoemaker. The schools should not teach directly how to perform the various duties of a farmer; but the man being a farmer, education should enable him to know what to raise on this or that soil,—to produce better wheat, more of it, and at less cost; in short, to carry the business of farming to a higher grade and to do more business, do it better, and do it cheaper by having been educated in the schools. Above all, being a *man*, to be a wiser, a more useful, a more successful, and a *better* man,—less like a demon, less like a brute; more like an angel, more like God.

It is clear to all business-men that a larger intelligence, a sharper intellect, a better cultivated mind are necessary to transact any kind of business successfully, to-day,—to meet the intense competition, and to succeed in any calling in life,—than were required one, two, or three generations ago. It is also apparent that a still larger intelligence, a sharper intellect, a better cultivated mind will be necessary to attain equal success a generation hence than are found requisite to-day.

If the foregoing propositions are admitted, it will appear that the principal aim of education is to discipline the mind and increase its powers, not merely as an instrument for an immediate *end*, but especially as a means for more distant and perhaps indirect, results to follow; in short, that greater ability and consequently greater success and usefulness may be attained in life.

Two things, then, would follow of necessity: 1. That the business interests of the country require a large advance in the quality and completeness of schoolwork over the past. 2. That to attain this result we must improve the generally-accepted curriculum of school studies. From the first of these we infer that the high school is necessary for the successful carrying out of the business projects of the country; and from the second, that careful attention should be given to arranging the most philosophic, the wisest, and the best course of studies for a high school, whose chief function is to prepare young men for a business-life.

That is the true order of studies which best develops the various powers of the mind and places them under one's most complete control. It is frequently observed that a teacher who is an expert in one branch of study, magnifies that department to the exclusion or neglect of other studies of equal or greater importance. For example: it is often assumed, either consciously or unconsciously, that mathemat-

ical study does more than most other departments of school-work toward disciplining and increasing the reasoning faculty and its cognate mental powers, and thereby produces a greater and more rapid growth of mind. But it is confidently believed that this is not true. We believe that the schools should not be based upon mathematics, or upon any other one direction of study. In the high school the pupils are supposed to have reached that age when disciplinary studies, especially those calculated to improve the reasoning powers, may be pursued to advantage. The powers of the mind are not simple, single, and isolated, but multiform, compound, and complex,—interdependent upon each other for the best performing of their work. These powers should be developed harmoniously, uniformly, and consecutively.

Avoiding hobbies, such an arrangement of studies should be made as shall accomplish two things: viz., (1) the pursuit of the several branches taken, in their natural and logical order, and hence (1) the harmonious development of the several sides of the mental organism. Assuming a four years' course of study, for pupils averaging at the beginning of the course fourteen years of age, the studies to be taken will group themselves under several heads; and we will first consider three divisions; viz., 1. *Language Studies;* 2. *Natural Sciences;* 3. *Mathematics.* These three directions of study are placed in the order of their prominence, and should be pursued simultaneously.

Here it will be necessary to consider particularly the question of the study of the Latin and Greek languages. From the technological schools of Germany, the schools of science in America, and from many of the best minds in England and this country, the testimony is strong in favor of the study of these ancient languages for their influence in disciplining and developing the mental powers.

Says Prof. C. O. Thompson, in his paper which forms a part of this report: "In a body of students pursuing technical studies it is easy to detect the advantage those have who were 'fitted for college,' as shown in power of concentrated attention, quickness and accuracy of apprehension, dexterity in speech, and general command of themselves."

We believe that the study of these languages is of great importance, for the purposes of development and training mentioned above, and that our experience sustains us in the belief that no sufficient substitute has yet been found to take their place. Yet the element of time comes in, and the opinions of the community are such that in many places we shall find it desirable to divide the curriculum for the high school studies, so that while those who "fit for college" pursue the ancient languages, others who wish to make the most direct prepara-

tion for business may leave these classical studies and confine themselves to what is often called *An English High School Course.* Yet even for such pupils, it is strongly recommended that where it can be done they pursue the Latin language in their earlier years,—say from ten to fourteen,—in place of a more exclusive attention to English Grammar.

With this explanation and statement of the value of classical study, we hope to be not misunderstood or misinterpreted, in now speaking of the most desirable and the most philosophical course of studies for an *English high school*, or an *English department* of the high school, whenever such exist and are thought desirable as a course of study in preparation for business-life. We would recommend, therefore,—

*First:* Language, or literary studies. These should include, during three years, Rhetoric, English composition, analysis of language, a careful and critical study of the choice thoughts of our best English authors, both as to matter and style; the general study of English Literature, and, as opportunities offer, one or two modern languages, pursued both as an end and as a means; that is, French, for example, may be studied from its grammar and philosophical side, so as to give the pupil something of the same kind of mental gymnastics and drill which come from the study of Latin; or by the oral method of familiarizing one's self with a certain vocabulary of words fixed in the mind especially for their immediate use in speaking that language.

*Second:* The Natural Sciences. These should be studied in their natural order, giving due prominence to the more practical branches, Chemistry, Physics, and Mechanics, and the study of Astronomy, so well calculated to broaden and ennoble the mind and to develop the powers of reflection.

*Third:* The Mathematics, pursued in their logical order. Assuming that some elementary principles of Geometry have been learned at a previous period, we should pursue (*a*) Elementary Algebra, (*b*) Elementary Geometry, (*c*) Advanced Geometry, (*d*) Advanced Algebra. (*e*) Trigonometry and Surveying, and then (*f*) Advanced Arithmetic, with the applications of Algebra and Geometry to Arithmetic.

Having thus developed and disciplined the mind by these studies for three years in these three general directions; viz.,—1. Language and literary studies; 2. The Natural Sciences; 3. The Mathematics; pursued consecutively and conjointly, we are now prepared to proceed to a new line of study, to occupy the fourth year of our course.

(1) Language gives place to History, which should be pursued not merely as an act of the memory in fixing in the mind a series of facts, arranged in chronological order, but the study should be pursued in

a philosophical way, having regard to the causes of important events and looking for the results of prominent and marked occurrences. Properly pursued, this study will develop the reasoning faculties and enable us, in tracing the progress of civilization, to observe such relations of cause and effect as will aid materially in fixing in the mind those strong principles of action which underlie all material prosperity, whether individual or national,—such as industry, bravery, generosity, probity, and, in general, moral rectitude.

(2) The Natural Sciences or Physics gives place to Metaphysics, and, we pursue, in a practical way the study of logic and mental philosophy. The importance of this line of study at this particular point of mental development can scarcely be overestimated. A careful study of the perceptive powers; of consciousness; of attention; of abstraction, especially including analysis, combination, and generalization; of the memory, of reason, and under this head the general principles of logic; of imagination and taste; cannot fail to develop those powers which will make a stronger, more progressive and yet conservative, broader, more useful and more successful business-man.

(3) The Mathematics must now give place to the practical and applied studies of Political Economy; the Constitution and government of the United States, and one's own State; and a general view of our governmental and constitutional history.

We have thus outlined for this final year of our high-school course three directions of study; viz.,—1. *History;* 2. *Metaphysics;* 3. *Political Economy*, etc. In this way, with this consecutive and coördinated system of correlative studies, it is believed our English high-school education will produce not erratic geniuses, fitted for nothing but failures, but men, with well-balanced minds, prepared to win success and achieve usefulness in the sharp contests of business-life.

NOTE.—In this course only the principal outlines of study have been indicated. It is taken for granted that particular attention is paid throughout the course,—as the circumstances shall warrant and make necessary,—to writing, spelling, vocal culture; to drawing and other methods of cultivating the mind through the hand and the eye; to gymnastic exercises and physical development in general; to the inculcation of proper moral lessons and whatever else should find its way into the best schools of the grade here indicated. By the foregoing plan of study it is merely intended to indicate the several general and coördinate lines of mental development.

## *THE HIGH SCHOOL: ITS RELATION TO SCHOOLS OF TECHNOLOGY.*

BY PROF. C. O. THOMPSON, TERRE HAUTE, IND.

Two sorts of institutions are designated by the term Schools of Technology,—Schools of Engineering, and Industrial Schools. The latter are somewhat in danger of being confounded with reformatory establishments, and are seeking a distinctive name,—so far without success. If a definition of technology could be accepted, as it certainly will be in time, which would confine it to engineering, then the term Technical School might be applied to those institutions whose object is to stimulate a taste for manual labor in workshops and to prepare boys for workshop life; but, at present, the term Technology is applied to all forms of special training which tend to fit men for any kind of service in the productive or constructive arts.

By a distinctly recognized process of segmentations, the schools of technology are making a real and organic division of labor which is already in advance of set terms, and which must be recognized in any such discussion as is undertaken in this report. The Worcester Free Institute, The Massachusetts Institute of Technology, The Sheffield Scientific School, The Stevens Institute of Technology, and some others, are schools of engineering, in each of which the same end is sought by different methods. It is of first importance to understand the relation of the high school to these schools of engineering. Nothing can be plainer than that any institution whose object is special, *i. e.*, any professional school, must demand of candidates for admission ample, general preparation, in order to do its work to the best advantage, and to escape the perils which constantly beset it. The ideal preparation for an engineering course is "to fit for college." It is perhaps an open question whether such knowledge of Greek as boys now get in fitting-schools is indispensable to success in engineering; but few professors of experience will hesitate to admit that a thorough training in Latin, history, English grammar, at least one natural history science, and the elementary mathematics, is the soundest foundation on which an engineering course can rest. In a body of students pursuing technological studies, it is easy to detect the advantage those have who were "fitted for college," as shown in power of concentrated attention, quickness and accuracy of appre-

hension, dexterity in speech, and general command of themselves.

Now, as the high school is specially the boon of the great producing and manufacturing class, and as technology draws its main support from the same class, it is reasonable that such a relation should exist between the two as should enable all boys to obtain the greatest possible advantage from both. The high school ought to fit boys for the school of engineering.

It may be best to concede something in the matter of time to the exigencies of the situation of the average boy who will not go to college, but will go to an institute of technology; but the *boy* must remember that the institute fits him for immediate entrance upon the active duties of his profession, while the college drops him three years short of that point. If, then, he will not go to college, he can at least afford to spend as much time in fitting for engineering as his neighbor who will go to college, for he will find his account in laying the broadest possible foundation before he begins to rear his superstructure. More and better *foundation work* is the demand of technology upon the high school. This proposition does not need any argument. The practical question is, What shall the high school do?

It is not practicable now to insist upon the ideal preparation in all cases, but every boy who aims at being an engineer ought to find in a high school such a course as this, extending, at least, over three years: In mathematics—Algebra, geometry, and trigonometry, *followed by a review of arithmetic.* In language—Latin, two years; *French, one year; English, three years. In history—general history. In natural-history science,—elementary botany, zoölogy, and mineralogy. The physical sciences can be studied to vastly better advantage in the Institute of Technology, and *after* a good preparatory training in the high school. But, when all the engineers are provided for, there remains a graver problem. Engineers are to design, direct, construct. They are to apply the canons of science to the industrial arts. Particularly are they to meet the new demand for machinery, by improving the old and producing the new. Every year puts some form of handicraft upon the retired list, and so increases the demand for engineering skill in the mechanic arts. Every new machine also increases the number of men who cease to be artisans in the old sense, and are occupied in building machines, in tending machines, or in finishing by simple hand-labor the products of machines. How shall the high school prepare boys for this new workshop-life? is a second question of greater importance than the first.

* It is desirable that beginners in an engineering course should be able to read easy French, so that they can devote their time to German and English.

It is assumed to be the function of the high school to do this. If any one doubts it, and would have distinct manual training enter into school-life at an earlier period, he may consult the objections to such a plan recited in the Forty-third Annual Report of the Massachusetts Board of Education, which seem to me unanswerable. The average pupil of our modern public schools receives, below the high school, 166 weeks of instruction of 30 hours each. This is not too much for the legitimate work of the lower schools; and it cannot be shown that any form of manual training introduced below the high school would tend to increase the time of school-life. All the facts and analogies of boy-life are against such an expectation. If, however, a definite provision is made for technical training, with a definite aim and a promise of occupation for the graduates, at a point just beyond the lower grades, it is very likely to increase the attendance in those grades. The plan now submitted seems to me reasonable and practicable:—

Provide a course of two years, of forty-two weeks each, using ten hours a day for five days a week. Take boys from the grammar school, who prove the propriety of giving them a trial by seeking admission, from twelve to fourteen years of age. Divide each class into two equal sections. Provide a workshop of sufficient capacity for one-half of these boys, *i. e.*, one section of each class at a time, and let the sections of each class alternate by half-days in using the shop. Provide a school-room in which precisely the same arrangement is made for instruction, except that attendance shall be required for three terms,—two hours being spent in study at home or in drawing. The result will be that each boy will receive 2,100 hours of shop-drill, and will spend 2,100 hours in school in the two years; the superintendent of the shop will be on duty ten hours a day, and the teachers in the school six hours a day. The workshop must be equipped with tools and machinery, and the boys taught construction in wood and iron, with as great variety and definiteness as possible. In the school-room they may study algebra, geometry, trigonometry, and arithmetic, in order,—twelve hours a week; drawing, six hours; science, six hours; English, one hour,—in all, twenty-five hours a week. At the end of this time, the experience of thirteen years in the Worcester School warrants me in saying that these boys will have no trouble in finding situations in workshops; or, if they find it possible and desirable, they can enter a school of technology and become engineers.

The cost of such a school will depend on the size of it. Buildings, engine, and boilers being given, I find that an expense of

$10,000 a year for five years will provide tools and pay for instruction for eighty boys, leaving the equipment good at the end of that time, to go on for an indefinite period at a much reduced annual expenditure. The plan adopted in the State of New Jersey seems to me the true one. The State promises $5,000 a year for five years to any town that will raise an equal amount for an experimental technical school. This plan gives the aid of the State through a special grant, and throws the responsibility of successful management upon those who are interested in the scheme in any given locality. If the experiment succeeds, there will be no lack of support from the classes directly interested in its results; and it is clear that the form of practice can be determined by the prevailing industries in any town.

A single fact shows the importance of giving immediate attention to this matter of the training of boys for technical pursuits: the dispersion of the manual trades has killed the apprentice system, and no manufacturer who is competent to train boys can afford to do it. What the master-mechanic has abandoned, the school must do; for whatever a boy can learn by direct inculcation, the school ought to teach him.

## EDUCATIONAL UNITY.

### THE HARMONIZING OF ELEMENTARY, SECONDARY, AND COLLEGIATE SYSTEMS OF EDUCATION.

The Committee to whom was referred the Harmonizing of Primary (or Elementary), Secondary, and Collegiate Systems of Education, present the following report:

The three systems here mentioned embrace the entire course of general education. They cover the whole of the school period, and they include all classes of institutions in which the educational work is carried forward. Those here called primary, or elementary, may be public or private, may be supported by taxation and directly controlled by public authority, or may charge tuition fees and be independent of the State. So the secondary schools may be public high schools; academies,—endowed, or the property of private persons,—or preparatory departments of colleges. And the collegiate system includes all institutions giving a liberal education, whether called colleges or universities, whether endowed by private munificence or supported by public funds. This system is not understood to include professional schools, or post-graduate courses.

These three systems are not parallel, but successive. They are not alternative or competitive. They are strictly parts of one continuous system; three stages of the educational process, succeeding each other in the order named. The education of the pupil is supposed to begin in the elementary, through which he passes into the secondary, and thence into the collegiate, where the work under teachers is completed. The time usually spent in the elementary department is six or eight years; in the secondary, three or four; and in the college, four.

These are the existing systems of general education. They are not now to be created, to be called into being; they already exist, and are doing, and have been for many years doing, their work. The youth who is so fortunate as to enjoy the best educational advantages begins with the elementary school and ends with the college. If here and there one receives private instruction for parts of the course, whether in its earlier or later stages, the case is exceptional. The vast majority who are educated are educated in these three systems of schools. Everywhere in the civilized world this general process

is substantially the same. It is the course through which the intelligent parent, in the old world or the new, who wishes to secure for his child the best results of general educational training, will desire that child to pass. The three stages may not cover the same periods in different countries, and they may be known by different names; but in general the time from the age, say, of six to twenty or twenty-one, is devoted to the educational work.

The general object aimed at in all these three systems is the same. They have in view exactly the same end; they all tend toward the same goal. The very reason of their being is to transform the child into the cultivated man or woman. The educational course is virtually one. Its essential law is unity. Each system, each school, each teacher, has a particular work to perform for securing the grand result. Without harmony in the working of the several parts, there will necessarily be disarrangement, confusion, loss. In a manufacturing establishment every man's labor, whether of head or hand, looks to a given product. No man, from the superintendent to the lowest workman, works at random, or independent of the rest. In the building of the locomotive every screw, every rod, every plate is made to fit the place for which it is destined. This is essential to securing the final result, the completed machine. In the cotton-mill the size of the thread is determined, not by the preference of the individual spinner, but by the fineness of the cloth into which that thread is to be woven. So is it in the educational process. Every part of the work is a work of coöperation. No one man takes the boy or girl through all the stages. Each teacher in each system has a part assigned to him. He is to take the pupil over a portion of the course; to advance him from one given point to another. His work is well done when the pupil passes from him thoroughly prepared for the subsequent stage. The best education is secured when the work of one system or stage thus fits into the work of that which follows it.

Your Committee believe that this essential unity of the educational process will not be controverted. It is independent of the particular character of schools, as public or private. All the schools of all the systems may be supported and controlled by public authority, or that authority may reach a part of them, or all may be outside of it. Whatever may be true in this respect, the educational process must have a beginning and an end. In each case the pupil must pass through the successive stages. Nor is this unity affected by any imperfection of any of the systems as now existing. If the secondary system be imperfect, it is still the second in order, and the pupils from the elementary schools must pass into it. So, if a liberal education

is to be secured, the work must be done by the colleges, because they constitute the third system, and the only one to complete the course. These three systems may all be made better from time to time, and should be; but they are the existing systems, and constitute the one great course of general education.

The language of the subject assigned to your committee implies a lack of harmony. They were directed to consider the *harmonizing* of the three systems. The primary, or elementary, and the secondary are believed to be in substantial harmony. So a considerable portion of the secondary are in harmony with the collegiate. The exception is in the case of some of the public high schools. In some States most of these schools give instruction adapted to the work that is to follow, and in all the States the best schools do this. They prepare their pupils for the colleges. In others, however, the pupil finds when he has finished the high-school course that he must spend one or more years of special study before he can enter the college. Here is a chasm between the second and third of the stages of the great educational course. The harmony is broken. It is as if, in a long journey, we come to the terminus of one railway and find a space of twenty, fifty, or a hundred miles before the other begins; and we must give up the rest of our journey, or get over this intervening distance as best we can. This would be abnormal in railway traveling, especially on a great through *route*, between two very important points. The break between the high school and the college is quite as abnormal in education. The high school is sometimes, perhaps often, conducted as if it were the last stage of the educational process. From the course of study, from the general animus of the school, and perhaps from the direct influence of the teacher, the pupil receives the impression that there is nothing more to be learned. Thus his desire to secure a complete general education is checked or extinguished. The third of the three systems, the last stage of the process, is virtually ignored. The high school is made the terminus.

It is true that many pupils do not go beyond the high school. It is quite as true that a still larger number do not go beyond the elementary schools. But the elementary do not, on this account, ignore the high schools. On the contrary, every teacher desires that the largest number possible should pass up from the lower schools into the higher. Your Committee cannot see why the high school should not recognize the college in the same way, and give instruction with reference to it, to those pupils who wish to pursue their studies beyond the high school course. The unity of the educational process certainly requires this. It requires also that those who expect to take a collegiate course should not be required in the high school to

do that work which must be done over again in the college. The chasm now existing in so many cases between the high school and the college may thus be easily bridged; and valuable time be saved by omitting matter which will be better attended to at a later period.

Many colleges have provided a course of study in which the modern languages and other branches are substituted for the Greek of the classical course, the two courses being in other respects identical. For this course the degree of Bachelor of Philosophy is given, as that of Bachelor of Arts is for that known as the classical course. These and other modifications clearly indicate a willingness on the part of the colleges to do all in their power to secure harmony between the collegiate and secondary systems.

Your Committee have not attempted to mark out with exactness the different functions of the three systems whose harmony they were asked to consider. They have simply taken them as the first, second, and third of the three great stages of the educational process. Being successive stages in that one process, their successful working imperatively requires harmony. It is, then, manifestly the duty of all on whom is devolved the responsibility of marking out the courses of study for these three stages to keep this harmony constantly in view. While the function of the colleges, as the final stage of the educational course, should be never lost sight of, the work they require should, as far as possible, be so arranged that the secondary or high schools can adapt themselves to it. And, on the other hand, the work of the secondary should be so arranged as to facilitate in all practicable ways the passage of the pupils from them to the colleges. It should be noted that those States, whose educational status is regarded as the highest, furnish the largest proportion of high schools that give preparation for college. And in all the States it is the best high schools, whether in large towns or small, that do this college preparatory work.[1]

Your Committee have not deemed it necessary to go into any detailed arguments for classical instruction in the high schools. They have thought it sufficient to present as clearly as they could the single idea of *the unity of the educational process;* believing that if this be conscientiously acted upon by the Boards of Control and Instruction in our schools and colleges any want of harmony would soon disappear. The question is not one of individual preference or prejudice as to the utility of certain studies, but whether the young men and women of the land shall be helped or hindered in their efforts to obtain a liberal education.

[1] In some of the high schools in Michigan a fee is charged for instruction in Greek.

# *COURSES OF STUDY FOR COUNTRY SCHOOLS.*

REPORT OF COMMITTEE ON A COURSE OF STUDIES FOR COUNTRY SCHOOLS; J. W. DICKINSON, *Chairman.*

The topic assigned to the Committee on Elementary Education is, "A Course of Studies for the Country Schools." To construct a satisfactory course of elementary studies it will be necessary to ascertain,—

I. The ends to be secured by a course of studies.

II. The principles to guide in the gradation of the studies of pupils according to the different stages of their development.

III. To make such an application of the principles as to meet the varied wants of pupils belonging to city schools, to schools in the large towns, and to the schools in the rural sections of the country. Pursuing this plan, the committee have unanimously adopted the following

REPORT.

The report will appear at first to recommend a course of studies suitable only for the graded schools of the larger towns; but as our schools are all graded, even though the different grades are taught, it may be, by one and the same teacher, the course is designed for the schools of the small towns also. At least, the course proposed may be considered an ideal course which will guide to a practical course for the schools of any community.

I. *Ends to be secured.*

There is one ultimate end to be secured by all school exercises: the harmonious development of the faculties of the human mind. To attain this end, several subordinate ends must be sought.

1. The child must be subjected to such modes of life as will give him a sound body.

2. He must acquire a sufficient amount of useful knowledge.

3. He must become master of good methods of thinking and acting.

A sound body will furnish the mind with a good instrument to use.

Useful knowledge is both the result and the occasion of that activity of the mind which produces the best development of the powers.

A good method of work will determine the amount and character of both the knowledge and development acquired.

II. *Principles to be observed.*

In providing for the complete development of the child, the educator must keep his attention steadily fixed on the nature of the child's mind. A course of studies adapted to the different stages of development of which every mind is the subject, will furnish an orderly arrangement of topics that will occasion the right exercise of the observing powers,—the powers excited to activity by the presence of external objects; the exercise of the representative powers, memory and imagination; and the exercise of the elaborative powers, generalization and reasoning. While it is true that the mind is a unit, and so is not divisible into distinct powers, still as it acts in different modes, it is usual to assign to it different powers as its different modes of acting are considered. The different powers are simply functions of a single agent; yet they are distinct from one another, both in their mode of acting and in the objects of their activity. To form an idea of a present object is a distinct act from that of reproducing a similar idea of the object when it is absent; so we say the mind has both a presentative and representative power. For a similar reason we say the mind has an elaborative power, by whose activity it performs all those operations involved in classification and reasoning.

While it is true, also, that no definite period of time can be appointed for the exclusive training of the mind in any of its modes of activity, still both consciousness and observation prove that there is a stage of development in the history of every child when the more especial work of its intellect is to observe external things as they are presented to the senses; that at a later stage it has added to its power of observing an increased facility in reproducing the real by memory, and the power of creating the ideal by imagination, making use of language instead of things as the occasions of activity; that, finally, there is a third stage in which the intellect has, in active and easy exercise, in addition to the acquisitive and conservative powers, the power of generalizing particular truths, of forming classes, and of arriving at a knowledge of general principles.

On account of the existence of these stages of development of the mind, and on account of the relations which the different kinds of knowledge hold to one another, educators are accustomed to grade the schools and to establish an order of studies, in which due attention is given to the activity of the mind and the kind of knowledge which characterizes each stage of mental development.

III. *Application of principles.*

The topics of study and practice adapted to the first stage of de-

velopment mentioned, are reading, spelling, elementary composition, numbers, linear drawing, singing, and gymnastic exercises.

Reading should be taught as a means of acquiring knowledge, of reproducing it, and of expressing it to others.

Spelling should be taken up, as necessary to the construction of words in written composition, but not as immediately connected with reading.

Exercises in numbers in the lower elementary schools should be confined to the application of the four fundamental rules to integral units. The pupils may be taught to construct as well as to solve their own problems.

Elementary composition may be introduced into the primary schools from the first. Oral and written composition, with reading, may be classed under the topic Language Lessons. The pupil is to be prepared for exercises in constructing compositions by objective teaching, that has for its object a real knowledge of what is to be described. Careful and persistent instruction should be given in the selection of words and construction of sentences. A few marks of punctuation may be introduced. Pupils in elementary composition should be taught to use figurative language, and that use of language which constitutes a good style, all to be taught as facts without referring to principles.

Linear drawing should be introduced for the training it gives to the hand and eye, and the effect it produces on the habits of observation. Drawing may be made also a means of cultivating the taste, by leading the pupil to turn his attention to the beauties of nature and of art.

Gymnastic exercises have for their object the health and grace of the body. They should therefore be planned and conducted by those who have a knowledge of the physical constitution of the children, and the conditions necessary to its proper development. All that which is presented to primary pupils must be taught objectively.

In addition to the topics peculiar to primary work, a series of lessons should be given on the properties of things. These are to prepare the pupil to take up the work done in the grade of schools above his own, where the pupils are put to comparing things with one another for those marks in them by which they are known to be either alike or unlike.

The second grade of development will require the following course of studies: Reading, Spelling, Composition, Numbers, Singing, and Drawing, which studies are a continuation of the primary course, but more advanced; also facts of History, elements of Geography, elementary lessons on plants, animals, and minerals, and elementary lessons in Chemistry and Physics.

Reading is to be conducted after the same general manner as in the primary course, except there may be more practice in silent reading. Selections from both prose and poetry may be read. The attention of the pupil should be called to the figurative language to be read, and to some of the properties of style.

Let the spelling exercises be conducted in the written form. The words spelled may be taken from the reading-lessons, or from any lessons given in the course. The pupil will have a large amount of spelling in connection with his written composition.

Written compositions are now to be constructed in accordance with a plan which is to be illustrated by the teacher. The subjects of the compositions may be natural objects or historical events, or the creations of the imagination. The teacher should correct the spelling, the grammatical and rhetorical structure of the compositions, and to a slight degree their punctuation.

The fundamental operations in arithmetic may be applied to both integral and fractional units, and to compound or denominate numbers. The metric system of weights and measures may be introduced, and all the arithmetical knowledge gained may be applied to the simple forms of business-life.

Some of the events of history may be taught to pupils in their second grade of development. Let these events, for the most part, relate to the United States, or to the State in which the pupil lives. They are the facts of the discoveries, explorations, and settlements made; of the revolutionary and constitutional periods of our history, and facts pertaining to our Civil War. The same topics that will apply to the whole country will apply equally well to each one of the States.

The elements of geography which it is proper to introduce into this grade of instruction include object-lessons that have for their end a training of the pupil to learn from illustrations. They include, also, a knowledge of that which is expressed by geographical terms, and a knowledge of those geographical objects with which it is desirable the pupil should become acquainted.

Elementary lessons on plants, animals, and minerals should direct the attention of the pupil to the parts and qualities of these things, a knowledge of which will enable the learner to compare the different kinds of natural objects for their resemblances and differences, and prepare him for a future classification.

By experiments, made with proper apparatus, those changes in bodies which do not affect their identity, may be presented for an observation of facts in physics, and those changes in bodies that do

affect identity, for facts in chemistry. The facts taught through a reproduction of phenomena by experiments should be such as will be useful for the pupil to know, and such as will be used in scientific study, if the pupil should desire to pursue his work beyond that taken up in the elementary schools.

The third grade of development, that which relates to the special cultivation of the reflective powers, will require the teacher to present the subjects of study already mentioned in their more advanced forms, and finally as sciences. Reading should be taught as a means of gaining information, and of forming a correct taste.

Composition-writing should be taught in accordance with a method. in which the rules of grammar and rhetoric, and some of the principles of logic, may be applied.

The study of numbers passes to the study of arithmetic, and the pupil is taught to apply general principles to the operations of business-life.

Practice in the use of language passes to the study of grammar for the principles of construction.

Geography is taken up as a science. Geographical facts are taught and referred to their causes. A method of classifying plants, minerals, and animals may be taught. Not much time should be spent in this work,—simply time enough to teach a method of classifying. The pupil can use the method after leaving school, and without a teacher. Chemistry and physics may be taken up in a similar way. The laws of health may be taught under the topics Physiology and Hygiene. Penmanship may be taught in connection with written composition, and book-keeping with arithmetic.

If the pupil remains in school through the course marked out for his third stage of development, he may take some lessons in geometry and algebra, and devote some time to the study of ancient and modern languages. As language holds the relation of signs to our knowledge, and is the means by which we preserve our knowledge and communicate it to others, language should be taught and learned in connection with the acquisition of knowledge. All the lessons taught may be called language-lessons; for a complete knowledge of the forms and use of language implies a knowledge of all that which is to be known.

It should be the aim of the teacher in all his teaching to communicate knowledge, by which is meant to lead the pupil to acquire knowledge for himself; to teach a good method of study, and to give a proper training to the whole nature of the child.

The industrial element of education should be introduced in some

form, so as to turn the attention of the pupils toward work while they are passing through the schools, and so as to make it appear most honorable in their eyes. Moral lessons should be constantly given by presenting examples of good conduct, and by calling attention to the moral quality of actions.

Signed by the Committee:

J. W. Dickinson.
N. A. Calkins.
D. N. Camp.
S. S. Greene.

# BEARINGS OF FROEBEL'S WORK.

BY W. N. HAILMANN.

There can be no doubt in the minds of calm observers that foolish exaggerations and extravagant claims concerning the character and nature of Froebel's teachings on the part of over enthusiastic friends, have done much to injure his cause in the eyes of sober, thoughtful people, who, while eager for progress, distrust revolutionary proceedings. A careful study of his teachings in the light of the history of educational thought and practice, will convince the earnest seeker that Froebel is the logical outcome of his time, that he rests firmly and closely on the attainments of his predecessors, that his aims lie fully within the possibilities of the race, and coincide completely with the aims of a rapidly advancing humanity. There is nothing in his teachings that is mystical or mysterious, or so complex that only a few gifted natures can ravel it; nothing that had not been thought of in some cruder form by earnest educators long before he organized the scattered thoughts into a living, beautiful whole.

I need scarcely insist that this intimate connection of Froebel's thought on education with the best thought of all times, this continuity of his work with the best work of the past, instead of lowering his merit, rather proves it and insures its permanence. Is Galileo's glory lessened by the fact that Aristarchus taught nearly 2,000 years before him that the earth moved round the sun? Does the fact that Plato had notions of universal gravitation diminish the noonday light of Newton's discovery? Is our debt of gratitude to the great Watt reduced by the fact that Hero of Alexandria used steam as a motor, or even by the fact that his steam-engine is but an improvement of the Newcomen engine? Or is the name of Herbert Spencer rendered less illustrious by the speculations of Democrites of Abdera, in which we find a strangely clear insight into the laws of evolution?

Similarly, it is one of the chiefest glories of Froebel's name that his truth is foreshadowed, that his coming is heralded, as it were, by all great thinkers on educational matters from Plato down to Comenius, Rousseau, and Pestalozzi. Confining our view only to the last two, we are struck with the continuity that runs through their work and Froebel's. Rousseau asserts the individuality of man, and bases all education upon it; Pestalozzi teaches that for education, individuality

is a growth, and illustrates this in intellectual education; Froebel vindicates for this growth universality, all-sided life; and shows that this individuality is of no value unless it "lives in free unity with mankind, with nature, with the universe, with God." Do you not see the chain? *Be, Grow, Live!* Rousseau vindicates to man the right to *be;* Pestalozzi teaches him that the royal road to the enjoyment of this being lies in *growth;* and Froebel adds value and dignity to both by his earnest, cheering demand for all-sided, unified *life* in the various phases of being and growing.

Accordingly, Froebel's chief characteristic lies in the fact that he translated theories into practice; he removes the more or less vague hopes and yearnings of educators from the shadowy realms of dreamland to the rich fields of reality, and discloses modes of procedure so simple and efficient that he might be called the Morse of pedagogics. Unquestionably, this implies, on his part, a clearer insight into principles, a more comprehensive view of the field to be encompassed, a more just appreciation of relative value, than was found in his predecessors and contemporaries; and, indeed, the perusal of his writings, —although, in view of his remarkably active life, many of them were almost hastily composed,—throws a flood of light upon questions formerly considered abstruse, rendering them perspicuous to the common mind and dear to the common heart.

The entire work of extraordinary men usually hinges upon some simple, almost axiomatic, principle of which they never lose sight, on which their eyes are fixed, as the mariner's eye upon the beacon-light. This, in Froebel's case, is the principle of unity. "In all things," he says, "there lives and reigns an eternal law. This law is enounced with equal clearness in nature, the external; in spirit, the internal; and in life, which unites the two. This all-controlling law is necessarily based on a living, all-pervading, energetic, self-conscious, and, hence eternal, unity. This unity is God. The divinity that is in each thing constitutes its essence. It is the destiny and life-work of all things to unfold their inmost essence externally, to reveal the divinity that is in them. Education consists in leading man, as an intelligent, thinking being, growing into consciousness, to a pure and unsullied, free and spontaneous representation of the inner law, of the divine in him. Education must lead and guide man to a clear insight into his own nature, to peace with nature as a whole, and to unity with God." And elsewhere he says: "Education must lead the child, must lead man to unification with life in all directions; it must lead him to full unification with his kind, with his neighbor, with society; it must lead him to the greatest possible unification with nature and her

laws; it must lead him to indissoluble unification with the principle of all being, the alpha and omega of life,—with God."

Of this lofty principle so clearly set forth by him, Froebel never lost sight in any portion of his educational scheme, at any moment in his busy life. Whether playing with the little children in his kindergarten, or instructing the pupils of his highest classes, preparatory for entrance into the university, this principle was his guide and criterion. It will be noticed that it contained nothing new in itself; but his full, clear, consistent translation of the principle into life and into the work of education was new, and is even to-day so very new that many, very many, fail to appreciate its great importance.

I shall select a few of the more prominent features of his scheme for the purpose of illustrating this single-hearted fidelity of the great teacher to a ruling thought. One of these is the bountiful provision for the all-sided self-activity it contains,—not the sickly quality which goes by that name in an ordinary school, where we may still find teachers with such extraordinary penetration that they can discover self-activity in a poor little child sitting for hours with arms folded behind the back, straining its poor tender nerves to the utmost to keep still, and pretending attention, doing (?) all it can to follow the rules; but a vigorous, healthy quality that fills the very atmosphere of the room with joy, a quality that shows itself in cheerful countenances, sparkling eyes, merry songs, child-like laughter, and other equally preposterous tokens of life, and strength and healthy development.

There is, indeed, a vast difference between the self-activity of Pestalozzi and that of Froebel. The former has reference more to acquisitive or learning processes that fill the memory without expanding or freeing the mind; it means long lists of names, series of dry, verbal facts, sets of formulas; it reduces the child, even in object lessons, to the condition of an answering machine or a repeating contrivance; and abuses reading, writing, drawing, and even singing, for purposes of mere imitation. Froebel's self-activity applies to the whole being. He would have all the child is, all that is in and about the child, self-actively growing, simultaneously and continuously,—the physical as the substratum of the psychical, the psychical as the essence of the physical, giving it meaning and value. Froebel looks upon the child as an individuality distinctly separated from all the manifold individualities that make up the universe, but with an all-sided, instinctive yearning for unified existence with all these, with points eager for contact, as it were, in all directions of being.

He reduced the phases of existence, so far as the human being is

concerned, into two vast currents opposed to each other in direction, but together forming a great circulation of mutual influences steadily growing in depth, width, and comprehensiveness. On the one hand there are from all sides currents of influence inward, resulting in insight, in understanding; on the other hand there are in all directions influences going outward, attempts to modify and control the surroundings for purposes and ends that have their origin within the human being, resulting in efforts to *do*, in all the various transforming, applying, creative, and productive activities, which alone entitle man to assume the proud name of *Lord of Creation*. These outward activities, in which the mind is concerned as fully as in the inward activities, by which mere knowledge is acquired, constitute in the aggregate the various forms of *work*, using the term in its widest sense. They were so sadly neglected in all educational schemes before Froebel, that work, which is indeed the noblest pursuit of man, has come to be considered as inferior to the more passive functions which, in their aggregate, constitute *learning*. Education is indebted to Froebel for its rescue from this pernicious error. It is true that work itself, by its own innate power, and in spite of its neglect by this school, had long before proved its superiority over mere learning in matters of blessing mankind, in the triumphal progression of all the various arts from earliest times down to the latest, and notably just before its vindication by Froebel, in the achievements of the steam-engine, illuminating gas, the railroad, the telegraph, and of mechanical arts generally; but to Froebel we owe its vindication for the school.

This should be kept in mind when we judge of the progress of our schools. If we dispense with the excessive use of text-books, and teach the children to use their own powers self-actively in the acquisition of ideas and in their verbal expression,—this is not Froebel, but Pestalozzi; if we throw aside the rod, and rely for progress and discipline upon our powers to make the school attractive and intensely interesting to our pupils,—this is not Froebel, but Richter or Diesterweg; even the "new education" of Quincy is not Froebel, but Pestalozzi and Richter and Diesterweg fertilized by the singularly humane and eminently practical spirit of our Republic, as personified in its supervision. Only when we shall have enabled the pupil at every stage of school-life to unfold all his new ideas at once in outward, plastic, practical life; to make use of every principle recognized in raising his life at once to a higher level of enjoyment and usefulness; to give full and satisfactory expression to his thoughts and feelings, not in *words* alone, but in *deeds;* only when drawing, modeling, carving, and all that is implied in Froebel's idealized workshop and school-garden,

shall have become part and parcel of the school; only when we shall have thus satisfied his great principle which calls for the "unfolding of the child's inmost essence externally," shall we have introduced the self-activity of Froebel.

Another prominent feature of Froebel's educational scheme we find in the importance he attaches to the cultivation of the emotions. The corner-stone of his educational scheme is the family. The family in its completeness,—father, mother, and child,—is to him the "holiest of holies of humanity," the conscious triune molecule of society. Father, mother, and child he likes to designate as the human personifications of light, love, and life,—light predominating in the father, love in the mother, and life in the child; now, as in the family, the mother,—love,—is the center and fulcrum, so in man, the heart, the feelings, furnish the center, the fulcrum of life. Hence the importance of heart-culture; hence the vast significance of human motherhood; hence the need of preparing mothers for the weighty work of giving direction to the child's being; hence the value set by him on music as an educational factor. What, indeed, are head and hand without the controling, guiding influence of the heart? This is in full keeping with his primary principle. The emotional element of our being, the heart, is surely nearest to the "divinity" within us; head and hand are but the instruments of the heart in attaining our destiny, which calls for the "external unfolding of our inmost essence"; the heart alone can give to the head and hand the direction that leads to "unity with our kind, with nature, with the universe, with God."

The same fidelity to this great principle of unification leads him to supply another sad deficiency in educational schemes. The importance of society to man has been sufficiently conceded to enable him to figure in definitions as a "social animal"; yet in the educational practices of home and school this phase of man's nature is wholly ignored; nay, it seems that both home and school are rather intent upon counteracting whatever social instincts there may be in the child's being. To the mother, the child is *her* child, and her solicitude rarely extends beyond this; in the school, it is *a* child, like all the rest in its care, and the aim seems to be to make, at best, a tolerable *average* child of it. The mother cannot be blamed, in her view of the case, because she has not the means, does not control the proper surroundings to train her child for life in a society of equals, and because, indeed, her special province is the nursing of the earliest germs of individual character which underlie the future social value of her child. With the school the case is different; here the

elements of a society of equals are given, and yet these elements are kept studiously apart, and not infrequently a hostile emulation is fostered, disintegrating in the school-room what may have entered into tolerable union in the play-ground. Froebel asks that the school in all its work should take the claims of social nature into account, that opportunities should be constantly offered for common enterprises, for purposes whose attainment needs the union of many. Only in this way men will learn to appreciate the value of society to them, as well as their own value to society; only in this way will they grow into that generous self-assertion, that rational self-sacrifice (wholly free from sentimentalism) that shrink from no duty and yield no right.

However, Froebel went farther. He was not satisfied with stating the desiderata; true in his own life to his great principle, he proceeded to "unfold his inmost essence externally." His writings are full of practical hints and directions, advice and experience on this subject; his own schools at Burgdorf, at Keilhau, and at Blankenberg were progressing approximations to these ideals. The kindergarten, too, or child-garden, the most widely known of his creations, finds its leading justification as an indispensable factor of an ideal education, in the fact that it is almost specifically the nursery for the social phases of childhood; an ideal society of equals, provided at the very moment when the social instincts enter the stages of consciousness; a preparatory school where alone the future citizens,—be their parentage high or low,—can learn the arts of coördination and subordination, of creating and directing leadership, of intelligent and cheerful helpfulness in the attainment of common purposes.

Thus it would be an easy and a pleasant task to show how, in all the various phases of his extensive work, embracing the entire business of ante-university education, he never lost sight of his great principle of unification and of the unfolding of our inmost essence in our external lives.

How strange! A hundred years ago he entered the world, a motherless boy; shortly afterward he lost his father, too, through the second marriage of the latter. Knowing the love of mother and father only by its absence from his life, as it were, only by his great, unsatisfied longing for it, he became one of the most eloquent teachers of mothers and fathers, teaching them a love for childhood which, in intensity and comprehensiveness, in unselfishness and wisdom, will be the ideal of coming generations. Scarcely thirty years ago the world began to heed his call, and to-day millions of all nations honor and bless his name. Is it, indeed, strange? Is it not, rather,

due to the fact that the bearing of his work and of his life,—with him synonomous,—lie wholly and fully within the great onward and upward drift of growing humanity?

May our homes and schools continue to grow in their appreciation of his call, until, with their help, light, love, and life, in generations to come, shall have freed themselves from the dross that encumbers them now and hides them from view; until in all the phases of being, men may learn, with their help, the divine art of "unfolding their inmost essence in their external lives"; until, through their agency, humanity shall learn to see, to love, and to live Froebel's great principal of unity.

## *SELF-CONSCIOUSNESS IN EDUCATION.*

BY REV. E. T. JEFFERS, D.D.

It may be taken for granted that Pestalozzi's idea of education is correct; viz., "The natural, progressive, and symmetrical development of all the powers and faculties of the human being," and also that much that passes for education is unworthy the name and fails of this end; and, on the other hand, that all education is, at best, relative; that we never reach absolute perfection; that that method and course of study may with comparative accuracy be called educational which gives the strongest impulse in the right direction and carries the student the farthest on his way.

With a bare mention we may lay aside the two popular meanings of self-consciousness, both that which makes it equivalent to egotism and also that which describes the power which we would prefer not exercising,—the power of keeping one's self bodily before his mind when he would much prefer forgetting himself.

Without attempting to fix, except while we are discussing this subject, the meaning of this much-defined term, let us agree that it is the power of introspection. Consciousness, as defined by Dr. M. Hopkins, "is the knowledge by the mind of itself as the permanent and indivisible subject of its own operations," (*Outline Study of Man*, p. 106). Self-consciousness is used in this paper about as Dr. Porter uses consciousness: "The power of the mind to know its own acts and states," (*Human Intellect*, p. 83). It is called often, figuratively the inner sense, sometimes the seventh sense. Sir William Hamilton says, "Self-consciousness is the power by which we apprehend the phenomena of the internal," (*Metaphysics*, p. 401). By self-consciousness, then, we can agree to mean the voluntary and direct knowledge of self, the power to know psychical phenomena directly and intentionally. If I am asked, "Do you admire Longfellow as man and as poet?" because I have the power of introspection I answer confidently, "Yes, I do." If asked, "Do you understand Emerson?" I can say, "Not always." But I have my own opinion of Emerson, something like that of Socrates concerning Heraclitus: "What I understand of him is very good, and I'm willing to believe the same is true of what I do not comprehend." Again you ask, "Do you know the difference between right and wrong?" I inquire within. I know

the difference between utility and inutility,—that is not it; also, between beauty and ugliness,—that will not meet the conditions of the question. But in my mental possessions I find a knowledge of the difference asked for, and also the difference between this difference and the other differences. I know all thoughts and feelings, all mental acts and states, before they find any expression whatever, and know them by the power we agree to call self consciousness. My aim in this paper shall be, not to defend this definition, nor to enter into any abstruse discussion of psychological facts or questions; but giving self-consciousness its place as one of the powers of the "human being," which must be developed in education, show what part it plays with teacher and pupil, and also, practically, suggest some means and methods for its development.

### I.—CONCERNING THE POWER ITSELF.

Since this power of direct and voluntary self-knowledge is that by which we gather the facts of psychology, some might suggest that it would be as well to make this a discussion of the value of psychology in education. But attention is directed specially to the power rather than to the material or the products. While it will be impossible to avoid reference to the science of mind and the phenomena of mind, yet we shall not forget that we are to examine particularly the power that is indispensable in furnishing the facts on which the science is built.

1. Self-consciousness is a power of the human mind. We are endowed with the ability to know psychical phenomena just as we are with power to know physical phenomena. "Introspection is observation, differing only in that the phenomena observed are subjective states and feelings, and not objective states and changes in the felt. We observe changes of feeling no less than changes in the external; and whatever place is assigned to observation in scientific methods must, on this ground, be assigned to introspection," (*G. H. Lewis: Study of Psychology*, p. 82). The same author says, again, answering Comte's assertion that the human mind is incapable of observing its own phenomena, "How, then, in the name of common sense, have we become aware of the existence of mental phenomena?" Let those who will, puzzle themselves with the question, "How can the mind think itself thinking?" the fact remains, that among the potencies of the soul is one which enables it to investigate and take full cognizance of its own acts,—its thoughts, emotions, and volitions, and in general its states. For the present let us be positivists, and be satisfied with facts without attempting

an explanation. Further, the question, whether or not every psychical state or act is preceded by a nervous change, or followed by one, or accompanies one, it is not necessary to discuss or attempt to answer. In whichever way it shall be answered, when a demonstrated answer is reached, it will not affect our faith in the fact that this power is possessed by the human mind,—the power to know itself.

It should be remarked, by the way, that the field for the exercise of this power is narrower than it was supposed to be by the ancients, who thought it sacrilege to dissect this mortal frame, and who appealed to self-consciousness instead of to physiology to decide questions concerning the action of heart and lungs. We may add, too, that the observations of this introspective power are steadied and helped and corrected by modern accurate physiological investigations. Yet there remains a field purely psychical, and a mass of facts of which we would be utterly ignorant but for self-consciousness, and for which, and for the accuracy and nature of which, we must always appeal to this unique power.

2. This power, like all other natural powers, is reliable; in its own sphere, infallible. If the facts of self-consciousness are not distinct in outline, they gain in certainty what they lose in definiteness. If we do not question the facts of vision, of taste, of touch, much less can we doubt those of knowledge and feeling. To discredit the senses threatens all the physical sciences; to distrust consciousness is to take the foundation from all knowledge. When the world becomes seriously skeptical as to the reliability of self-consciousness, we shall be universally, and in the grossest sense of the word, agnostics.

3. Just like other powers, self-consciousness is dwarfed by neglect and developed by legitimate use. To gain knowledge, develop the mind, enlarge the sympathies, strengthen the will, to furnish material for the exercise of the faculty, is one thing. To exercise the faculty on this prepared material, quite another. The world is full of beauty; yet, in the multitude, the æsthetic faculty is unused and undeveloped. So we find men with well-stored minds who yet have never exercised this self-knowledge. Some, and not a few, like Comte, who have spent much time in using their powers of observation of other things so exclusively that it is possible for them to deny the existence of a power of introspection. On the other hand, it can be developed to a degree so disproportionate that sense-objects will be denied their true relative place, and the man, however excellent in character and purpose, will be manifestly one-sided. Socrates, *e. g.*, who could gain neither pleasure nor information from nature, has left us the most thoroughly analyzed products of introspection.

Kant makes this power the characteristic of rationality. He says if a pig should ever reach that degree of self-consciousness that would enable it to say, "I am a pig," and understand the phrase, he would no longer be a pig. Whoever knows himself most thoroughly rises highest in the scale of rationality.

II.—CONCERNING THE RELATION OF SELF-CONSCIOUSNESS TO EDUCATION.

1. Recurring to the idea of education with which we started, it is evident that this, being one of the "powers of the human being," must receive attention and care enough to insure its "natural and progressive development" in order to the symmetrical product which education yields. Any course of study that does not provide specifically for the training of this faculty is defective, if it pretends to educate. The institution that offers any such partial course cannot be called, properly, educational. Students, trained however thoroughly in other respects, have been defrauded of an element of culture who have not been subjected to that course of mental discipline that develops self-consciousness. The investigation of physical phenomena, important as it is,—and we are only beginning to estimate it rightly,—requiring the exercise of perception, memory, imagination, comparison, analysis, and generalization; assisting as it does in the exploration of the border-land between the purely material and the purely psychical; important as it is as an element of education, can never become the exclusive educator. Nor is it, nor can it ever be, more important than the investigation of mental phenomena and the consequent development of self consciousness.

Schools which do not profess to educate, but only to train their pupils for some special or technical work, are, of course, under no obligation to develop the whole man. For many professions no special need is felt for this faculty in any great degree of strength. Yet, whatever the technical character of the school, from a theological seminary to a machine-shop, it should be pervaded by an educational atmosphere. Every teacher of every sort should inspire every pupil with a desire to be something more than his profession demands, to be broadly complete rather than narrowly successful. No university or college can afford to allow men to carry its degrees without some considerable development of self-consciousness.

2. The educator himself should have this faculty in perfection, both because he should be no mere specialist, no one-sided man, but a many-sided one; educated, when judged by Pestalozzi's standard; and also because this faculty is of special service to him in his professional work. Dr. Porter (*Human Intellect*, p. 11) makes the habits and

knowledge which come from intelligent self-study the source of answers to questions the profoundest and most difficult that the true educator meets in his important work. It lies on the surface to say that the teacher that best understands himself will take the most intelligent view of his pupil; and the conclusion is easy, that voluntary self-knowledge is the characteristic of the successful instructor, and development the first principle of pedagogics, and an essential feature of every normal school and normal course. The ill-taught teacher fosters peculiarities in his pupils and overlooks essential faculties; suppresses worthy aspirations and encourages little ambitions; and if there is any force in the teacher, makes every one of his graduates ten-fold more the child of one-sidedness than he is himself. He has hobbies, pet notions and methods. He is merciless on everything that does not fit into his queer mould and sows broadcast seed that raises a harvest of disagreeables and incompetents,—educational cranks.

The teacher, on the other hand, with self-consciousness well trained, perceives the defects in himself and corrects them. This experience is of service to him in correcting the errors and developing the excellencies of his pupils, but of infinitely more use in giving him patience and perseverance in his instructions, and in making him charitable and just in his treatment of those under his instruction. The products of his instruction will not be perfect, but they will be less imperfect than when he found them, and with a working model before their minds and a vigilant observer within that will insure future progress toward ideal beauty and excellence.

### III.—CONCERNING THE DEVELOPMENT OF SELF-CONSCIOUSNESS.

1. To the question,—which is of importance if the propositions laid down thus far are true, How can this power be developed? the most obvious answer is, By use. To increase the power of introspection, introspect! Examine persistently and systematically the intellections, emotions, and volitions of your own experience. Take an account of stock, mentally, often. Let time,—a fair proportion of time,—be given to this exercise. Let psychology, with this object, have a place beside the other ologies. Let it have as much attention as any, and more than most of them; more than physiology even, because the soul is more characteristic of the man than is the body; especially more, because in all the others the other faculties of the mind are directly exercised, and in this alone is the power of self-knowledge used directly and by intuition.

I have referred to the study of psychology. It is necessary to say

in this connection, that it is possible to carry a class through a text-book in this science with as little advantage to this special faculty we are discussing as would be gained from the use of a text-book on geology. A well-educated educator will develop in his pupils more self-knowledge in teaching mathematics than a mere hearer of recitations will in his pupils, with the best text-book on Mental Science. Where text-book, lectures, and oral instructions are so used as to provoke the exercise of the student's own powers in observing and verifying facts, the subject is interesting, and is pursued for its own sake and from the stimulation of growing powers.

Children cannot be taught too early to observe their own mental states, though they should be taught judiciously, lest they follow an abnormal growth of this power, which is as unsightly and as hurtful as any other disproportionate growth. The older, maturer, and better trained the minds of the pupils, the more attention they should be required to give to subjects that will directly exercise, and naturally and progressively develop self-consciousness.

2. This direct use of self-consciousness attains its best results when accompanied by an indirect use of it, in the study of the products of other minds; but those products, in order to contribute to the vigor of this faculty, must be interpreted,—estimated by your own mind. Without a vigorous use of self-consciousness, the study of the psychical products of others will degrade one to the level of an encyclopædia. On the other hand, a persistent use of self-consciousness, without a large acquaintance with others' thoughts, will give no reliable knowledge of mind in general, nor of the thinker's own mind even, but only a magnified view of his own most prominent mental characteristic. Returning from the contemplation of other minds, as seen in their varied products, he views his own in the light of his observations. Thoughts, motives, feelings, impulses that have been under the shadow of greater, *i. e.* more fully developed ones, are now brought to view. Vividness of outline is now given to ideas that before were of the vaguest description. By comparison, the mental facts that are universal and characteristic of the race are distinguished from those that are personal and accidental. "By striking off what is individual in each, we may get at a conception of what is common to all . . . . By including various races of men, . . . . we rectify in some measure the deficiencies inherent in introspection and reach the solid data for a general science," (*G. H. Lewis: Study of Psychology*, p. 97). Yet, after all, the data given us for our science are our own, and are given by self-consciousness, directly, though gained elsewhere indirectly.

Some studies may be named that are of special assistance in this direction:

1. In General Literature: The ancient and modern classics of all nations contain the best thought of the best minds. The survival of the fittest has saved us the trouble of weeding out the worst. Whoever makes the gems of general literature his own, knows himself in the light of all thought.

2. The Study of Language, and especially of languages: What better revelation of a nation's mind than in her language? How better trace the growth of intellect and emotion than in the coining of new words and in the change of meaning of old ones? The thought of old nations has been stereotyped for our study, and thence the thoughtful draws much self-knowledge. A comparison of languages is a long step toward the induction that reveals mind to itself.

3. In poetry we are permitted to look into the heart of humanity. The intelligent study of poetry reveals to us ideas of truth, honor, love, devotion, patriotism, beauty, justice, which may have lain dormant in our hearts hitherto, which it needed these words of the seers of the generations to discover and bring to the light, and which we now see as our own. The gross statement of the result of such study is, the student gets, acquires, or adopts ideas from the poet. The true statement has been given,—where the study is rationally directed, he knows himself better. His power of self-knowledge has been quickened and developed, and this is the best and most permanent result.

4. In the study of philosophical history, in which the student is led behind the scenes and permitted to look on the motives that lay behind wars and revolutions, and to study the personal feelings that were active in the formation of creeds and constitutions, this power of introspection receives large accessions of strength. While discovering the common clay in the hero, marks of total depravity in the Christian reformer, we find redeeming features in the "wisest, brightest, meanest of mankind;" and we find these characters, in large print, what is scarcely legible in our own hearts till after the reading elsewhere, thoughts and feelings that were always our own, though not seen till now.

5. None have been better assisted in developing the power of self-consciousness than those who have used intelligently the proverbs of Solomon and the Epistle of Paul to the Romans. Certain phases of our being, certain psychical facts, moral and spiritual, effectually hid by our pride, are brought out here distinctly and forcibly. A healthy

tone is given instantly to this introspective power when it breathes the air of these keen, crisp sentences.

6. One study, which in some respects deserves the highest place here, but which has heretofore received less attention than it merits in our institutions for higher instruction, is the *History of Philosophy*. In every generation there have been men,—earnest-minded, patient, thoughtful, strong men, who have studied the problem of the universe and have given us, in philosophical systems, the results of their investigations and meditations. These are sometimes referred to as cobwebs which should be brushed from the mental walls by all good psychical housekeepers; as mists that obscure the clear light of the nineteenth-century scientific sun; as fine-spun nonsense that belittles the mind that attempts to follow their threads of thought; and young men are exhorted to give their time to something useful, *i. e.* something that will yield a return of six per cent., rather than waste precious hours and years on these effete theories. One who has given us the most readable history of these systems, and knew them well, says of his history: This may be the history of mistakes but not of follies; and adds, we trace in their defects the cause of future victory. I do not refer now to the many advantages gained by a study of the *History of Philosophy*, as I did not to the profit of the other studies named. I say nothing now of the charity which this gives us for noble thinkers in all lines of investigation; of the gratitude developed when we see how much advance we have made on these old worthies, — gratitude to them often, for our position where we discover that we see farther than they did only because we stand on their shoulders; of the satisfaction of discovering that many of the wonderful new theories of things are only some old Greek's cast-off garments patched up with actual discoveries in physical science, — new cloth on old garments, with the traditional consequence; of the pleasure of discovering Hegel an eclectic, Leibintz a Pythagorean, Schopenhauer a sophist, Darwin a son of Democritus; of the stimulus given to our thought by contact with the thought, — the best thought of the generation, the thought of

> "The great of old,
> The dead but sceptered sovereigns who still rule
> Our spirits from their urns."

I refer to it here chiefly to show that it increases the power of self-knowledge. We read our own thoughts in the light of these brilliant speculations; we learn the possibilities of human thought both in the errors and in the correct notions of these Greeks and Germans. No theory of theirs, however wild, but has its possibility in every

mind. We may speak of the peculiarities of the Greek mind, of the Hindoo and of the Teutonic mind, but they are all human minds; and we must say in a sense different from that in which it was first uttered, "Nothing human is alien to me." So in each system of philosophy, as in the large maps of special parts of a country,—parts scarcely noticed in the general map,—we find some part of our own minds fully explored, clearly marked off and described; nothing down on the chart which is not in the mind, but much that but for the service of one whose theories are regarded as fit only for an intellectual museum, would never have been brought above the horizon of self-consciousness; but much that is of value to us because it is ours, and of great practical value when developed with other powers, discovered and used in accordance with their nature. So we may say, without exaggeration, that no man knows himself who does not know Socrates, Plato, and Aristotle; Des Cartes, Spinoza, Leibintz, Kant, Hegel, Van Hartman, and Spencer; Locke, Reed and Hamilton; and the other thinkers whose theories mark stages in the development of human thought.

I cannot close without emphasizing this notion, already expressed, that whether the study of these branches, and especially the last, shall yield only dry bones that no prophet's voice can inspire with life or clothe with flesh, or shall awaken living thoughts that can never die, will depend on the method and spirit of the instructor. While all, even the Bible itself, can be so studied as to make men narrower and more bigoted, all can be studied so as to teach us that while in the presence of God we are utterly insignificant, yet essentially we have powers capable of infinite results under a development that is natural, progressive, and symmetrical; and, further, that in order to insure a development that shall be natural, progressive, and symmetrical, there must be, first in the teacher and then in the pupil, a clear, vigorous, growing self-consciousness.

# THE TECHNICAL EDUCATION OF WOMEN.

BY JULIA S. TUTWEILER, OF ALABAMA.

The true profession of every woman is that of Queen. For this she was created, to rule wisely and well over "A Woman's Kingdom," a well-ordered home. A wise Providence makes provision for carrying out this design of woman's creation by causing the number of births of males and females to be nearly equal in every land, with a small excess of male births to allow or the more frequent deaths among men, owing to their more exposed lives.

But an artificial civilization often overrules the laws of nature, and there is a tendency in the men of all civilized countries to seek newer lands, less thickly populated than their own. Women, not having the same liberty of action nor the same capacity for bearing hardships, leave the older lands in smaller numbers, and, consequently, among those left behind the majority are generally women. This migratory instinct plays a valuable part in filling with inhabitants the desolate regions of the earth, and it will doubtless continue to act until all parts of the world are equally settled and equally fruitful. As such a state of things will hardly take place until the millenium, we may for all practical purposes consider the present condition of civilized lands as their normal one, and discuss the question, "What is to be done about it?" for this disproportion between the male and female population not only *exists* in all the older civilizations, but it is constantly *increasing*. The United States formed, in earlier times, an exception to this rule, and this country was consequently considered as the paradise of women; but at present, in all the States except those in the extreme West, the women outnumber the men. In Massachusetts the band of "forty thousand anxious and aimless women," mentioned in the address of a former governor, has become a by-word. Even in so new a State as Alabama there are said to be ten thousand more women than men.

Now these women must be either *consumers* or *producers*, for every inch of shelter we use, every grain of food eaten, every thread of clothing worn represent *labor* expended somewhere and somehow, either our own or that of another. Most of these women desire to be producers; they would prefer to feel that they are not mere drones in the social hive, living upon the honey gathered by their more fortunate comrades, but useful and necessary members of the community, adding to its material and immaterial wealth. This condition must be the happiest, since one of the blessings promised to the righteous is, "Thou shalt eat the labor of thy hands," not that of another's hand. Just here let me say, that the wife who manages her husband's household, and the daughter who takes charge of that of a lonely father, are as truly producers, self-supporting members of society as the

teacher or milliner. We are speaking now of those women upon whom no such sweet and sacred duties devolve. To be self-supporting is not merely the preference of many women, but a stern necessity laid upon them. While a few women may be found in other departments, there are practically but two vocations really open to women in the South, *teaching* and *sewing;* consequently, both of these are miserably overcrowded and wretchedly paid. The want of other avenues of occupation for our women is an urgent one. "How I envy you the consciousness of leading a useful life," said a Southern lady of culture and refinement to me the other day. "I can find nothing to do," she went on, "which will prevent my being a burden on others. I was not educated with the thoroughness required of teachers now-a-days, and, while I can sew as well as most ladies, the colored girl in the cabin across the road can do this so much better and more rapidly than I that I cannot compete with her, even in this so ill-paid an occupation. I would give all that I was taught in my school days in exchange for the knowledge of some one thing by which I could feel that I was self-supporting,—useful to myself and others." Sad enough words to come from one woman's lips, but when these are the unvoiced utterances of groups of unemployed girls in thousands of families who are withering away like clusters of sister-flowers on one stem, all the high possibilities which might have gladdened and enriched the world, unused and undeveloped within them,—how unutterably sad! Even for these two occupations, of which public opinion has tacitly allowed her the freedom, there are no full opportunities for proper preparation. The normal schools profess to supply this preparation for teachers, but their number is deplorably insufficient, and their work often that of a mere high school or college, instead of being strictly technical. To obtain preparation for all other occupations, individuals must use their own private efforts.

What is the remedy for this state of things? In what way shall we make available the vast unused capital of womanly intellect and energy that now, in defiance of all the precepts of political economy, is going to waste among us? I answer, *By the technical education of our surplus women;* that is, by teaching them thoroughly and well such arts and handicrafts as shall make them not only self-supporting, but contributors to the general wealth of the community. Let our girls who have no means be able to begin life as cheerfully and hopefully as their brothers, feeling that avenues of honorable labor are open to them in many directions, that there is a suitable place and well-rewarded work for each of them in the big world. How shall this technical education be provided for our girls? In other countries this has been done for the most part by voluntary associations and private benevolence. Three methods are in use: the first and oldest is that of apprenticeship,—the young girl being placed for a certain term of years in an establishment where the handicraft which she wishes to learn is pursued, and she goes through all the steps of its various processes. The objection which thoughtful philanthropists have found to this plan is, that it produces

a very one-sided development, preventing, almost necessarily, the acquirement of that general knowledge and culture which is necessary to the ideal citizen; yet this plan is largely adopted in the old world. A second plan is to establish institutions where adult women, who have already received their school education, can, by the study and practice of a few months, acquire certain handicrafts. Such an institution is the Victoria *Stift* of Berlin, established under the patronage of the crown-princess of Prussia. The objection to this worthy mode of assisting women to be self-supporting is, that what is rapidly learned never permeates, and becomes as completely a part of one's self as that which is more slowly and gradually acquired. "Pour water on the sand rapidly, and it runs off; pour slowly, and it soaks in."

A third plan, and it seems to me the best of all, being free from the defects of the two systems just mentioned, is that adopted in the *Ecoles Professionelles* of Paris. These schools owe their origin to the efforts of a noble woman of France, of whom American teachers should know more, Madame Elise Lemonnier. They are sustained by the efforts of a society which she organized for this purpose. Of Madame Lemonnier herself I cannot here speak further, however inviting the theme. Of her work I will give a very brief account. During the revolution of 1848 thousands of the workingmen of Paris, whose families depended for daily bread upon the daily work of their fathers, were thrown out of employment, owing to the cessation of many large public and private enterprises. The *mothers* of the hungering children attempted to supply the necessity, but it was as difficult for them to find the ill-paid labor for which they longed as for their husbands to get their usual well-paid employment. Madame Lemonnier attempted to assist the suffering mothers around her by organizing, in connection with other benevolent ladies, a Labor Bureau, where work, such as they said they could do, was given out to all women who applied for it, and a regular, if scanty, support provided for them. Madame Lemonnier, herself a most skillful housewife and seamstress, albeit an early disciple of St. Simon, and an enthusiastic political economist, was surprised and distressed to find how many of the women who applied to her for employment were utterly ignorant of the simplest sorts of handiwork. Their hands were as clumsy and awkward as if they were tools of which they had never learned the skillful use. The simplest needlework given out, stitching by hand the covers for common mattresses, was found to be beyond many of them. Madame Lemonnier believed that she saw in this inability to perform any but the coarsest and heaviest mechanical work the reason, not only of much of the suffering and poverty of large cities, but of much of their degradation and vice. Herself a happy wife and mother, her warm heart yearned over the comfortless homes and hapless lives of so many of her countrywomen. It seemed to her a duty laid upon those women whose lives a good Providence had placed in shelter from want and care and degradation, to make some earnest effort to bring to their less fortunate sisters some of the same blessings. For some years, with the assistance of a

few like-minded women, she selected promising young girls and placed them as apprentices to learn various handicrafts in institutions of France and Germany, paying all their expenses. In 1856 this work was systematized, and organized as "A Society for the Maternal Protection of Young Girls," *Societé pour la protection maternelle des jeunes filles*. Eighteen ladies met in the parlor of Madame Lamonnier, and organized themselves under this name. But the new society soon found the existence of the objection which I have mentioned regarding apprenticeship. The resulting working-women were too literally "hands." Neither head nor heart would receive systematic cultivation. As a result of this experience, the *Societé pour la protection maternelle des jeunes filles*, was changed in 1862 to a "Societe pour l'enseignement professionel des femmes;" that is, an Association for the Promotion of the Technical Education of Women. This society proceeded at once to open schools under its own care. The first one was opened, and began with six pupils. At the close of the scholastic year there were forty; at the beginning of the next year there were eighty; so that the school had to be removed to a larger building, where it now numbers two hundred and twenty pupils,—all that can be accommodated.

Three other schools have since been begun, with equal success. This rapid increase shows that these schools had met a deep-seated want. It should be remarked that this society must be credited, not only with the good done by the four large schools under its care, but also much that has been accomplished by efforts in imitation of theirs by other associations. For instance, the largest Protestant church in Paris, through the exertions of its pastor, M. Berrier, at present the most distinguished of French Protestant ministers, opened, during the year of 1878, a school of this character in buildings attached to the church. This school, to which I paid an interesting visit, is adapted to supply the needs of the lower and middle classes of society.

But women feel the need of being self-supporting, in the highest ranks as well as in the lowest; and I visited also a very fine institution designed to supply this need. In the institution dedicated to "Notre Dame des Beaux Arts," Our Lady of the Fine Arts,—the daughters of noblemen and government officials, reduced in fortune, and other decayed gentry, have the opportunity, among elegant and refined surroundings, to learn many beautiful and tasteful occupations, by which they can afterwards earn a comfortable support without going out from the shelter of their own homes. The painting of miniatures, china-painting, carving in ivory, wood-engraving, artificial flower-making, are some of the occupations which can be there pursued.

But to return to the regular *Ecoles Professionelles* of Madame L. Lemonnier, of which the two just mentioned are worthy imitations. The fundamental idea underlying the plan of these schools is, that it is possible to teach a handicraft while giving the pupil a good general education, and that this wider and more varied culture, far from interfering with the mechanical skillfulness of the pupil, will make her a better workwoman. The

Society had an exhibit of their work and methods in the Pedagogical department of the Universal Exposition of 1878 at Paris, among many other industrial schools of various countries. The highest honors, a gold medal and a golden diploma, were awarded to their display.

The course of study embraces three years; the literary course is that laid down by the French government for schools of the second grade, corresponding somewhat to our grammar schools. The pupil must be at least twelve years of age, and before entering must submit to a preliminary examination, that the Society may be sure that the advantages which it offers are not thrown away upon those incompetent to profit by them.

The hours from 8 to 12 o'clock are devoted to the usual lessons of a common school course, the pupils being divided into three grades of advancement. After an intermission the pupils reassemble, and the afternoon, until 6 o'clock, is devoted to instruction in the various handicrafts which the pupils have chosen to learn. Of course a different room is assigned to each employment. The number of hours spent in school would be too great if devoted altogether either to literary pursuits or hand-work, but is not too great for girls of this age when divided between the two sorts of occupations. In fact a school-day thus spent is far less hurtful than that of most of our older pupils in high schools and colleges, who spend six hours daily in the school-room, and devote from three to four hours in preparing their lessons and practising their music.

There are about ten different *professions*,—trades or handicrafts, as one would call them,—taught in these schools. Among these are book-keeping, including everything else necessary to a commercial education; painting on porcelaine; wood-engraving; artificial flower-making; designing patterns; painting window-shades, and other industrial and decorative arts. Millinery and dress-making are taught, and in such a way as to make of them fine arts. During a very interesting visit paid to one of these schools in Paris, in 1878, the writer was shown many beautiful articles made by the pupils. For instance, a silk fan, worth, perhaps, originally about fifty cents, had, by an exquisite painting of nymphs and goddesses, been transformed into an article of luxury worth from five to ten dollars. The articles shown to me were to be sold at a bazaar held once a year for the purpose of aiding the funds of the school by disposing of the work of the pupils. People who feel an interest in the noble work which these schools are doing often help them by giving orders to be filled by the more advanced pupils. The visitor was shown a set of window-shades in Japanese style, which had been ordered by a prominent member of the Government for his own residence. These articles are usually much more artistic than those furnished by the regular trade. This is a natural result of the fact that all the work of the school is done under the constant inspection and criticism of the ablest and most artistic masters that Paris can furnish; for the directors of this enterprise have found it the best policy to get the very best possible instruction for the pupils, no matter at what cost. Cheap instruction would necessarily

be second-rate, and second-rate teachers would produce second-rate artisans, injuring permanently the character of the schools. The price of tuition in any one of the handicrafts taught is ten francs, that is two dollars, a month; if the pupil takes also the literary course, the charge is about two dollars and a half. Scholarships have been founded by benevolent individuals, and many pupils receive the whole or part of their tuition free.

Now it is not asserted that schools just such as these are what our country needs; for every land has its own peculiar wants. This account has been given to show how one country has dealt with this difficulty, in hopes that it may contain some suggestions worthy of attention. It would be hardly feasible to establish schools wholly of this character outside of a great city; but might not technical departments be added with good results to many of our existing high schools and colleges for girls? *All* the crafts taught in the schools at Paris would not be available here; but others could take their place,—short-hand writing, printing, book-binding, the finer kinds of confectionery work, wood-carving, could be added to the list.

The expense of such an experiment would be the sole obstacle; no private institution would be able to undertake it. But would it be unreasonable to ask the State or the Nation to assist in a work so much needed? In every State of the Union the State makes large provision for the *literary education* of its young men by means of State universities. In not one does it make any such special provision for its young women; at most they are permitted, and this only in some States, to *share* in the advantages prepared for the young men. *Technical education* for young *men*, in at least *two* pursuits, is provided by the *Nation* at immense cost in its naval and military academies. The *State* also provides for several kinds of technical education for young men by means of agricultural and mechanical colleges and normal schools. To the latter alone, in most cases, women are admitted. Neither the Nation nor the State has ever made any *special* provision for either the literary or technical education of its *women*. There is a manifest injustice in this, in regard to those women who are, like men, expected to be self-supporting. Naturally less strong physically or mentally than men, they would be able to compete with them in the race for a livelihood, even should they begin with the same previous preparation; with such odds against them as they have under the present system, it is not strange that so many women make failures when they attempt this competition.

The proposition that the State or the Nation ought to make provision for the technical instruction of those of its women who must be self-supporting is not a new one. It should be a matter of pride to Alabama, that one who belongs especially to us, one in whose fame we take a just pride,—our own senator, General Morgan,—was the first man in the United States to raise his voice in favor of this simple piece of justice to the women of his country. No one had ever proposed before, se far as I am aware, that even a few of the crumbs that fall from the national table should be thrown to woman. In an act brought forward by him in 1881, but unfortunately never passed, it is

proposed as a condition on which alone the money obtained from the sales of the public lands shall be given to the agricultural and mechanical colleges of the land, that each of these shall be required to annex departments in which various branches of skilled labor may be taught to women. The act was not passed, but in this world, every failure is a step toward success, and in this proposition we see the first sign of an interest on this subject which will doubtless be translated into actions.

Then we may hope to see the growth of a healthier state of feeling, not only among men, but among women themselves, in regard to the nobility of labor. An Englishman once said that the difference between the Scotch and English universities is that the Scotch universities teach a young man how to make a thousand pounds a year, and the English universities teach him how to spend that amount. This is pretty much the difference between girls' schools as they now are, and girls' schools as they would be with these technical departments added. When this is done it is to be hoped that the girl who saves her father every year a thousand dollars of a salary once paid to his book-keeper will not be less esteemed than the young lady who spends for her father a thousand dollars a year.

We are sometimes referred to the life of woman in more primitive times as the model of what ours should be; and the rebukers seem to think that the women of old times were only housewives. But in the oldest description we have of the model woman of ancient times, we find her life far from devoid of large cares and interests. She engages in important, independent *agricultural* undertakings. "She considereth a field and buyeth it; with the fruit of her hands she planteth a vineyard." Besides supplying the needs of her family, she engages in *manufacturing* operations. "She maketh fine linen and selleth it, and delivereth girdles to the merchants." She is not unacquainted with the exchanges of commerce. "She is like the merchants' ships, she bringeth her food from afar." And for the women of later days we are asking now only the privilege which the wisest of men desired for that older sister of hers three thousand years ago. "Give her of the fruit of *her* hands, and let her *own* works praise her in the gates."

THE first article in this number of EDUCATION, by Z. Richards, of Washington, D. C., is part of an essay which received one of two premiums of fifty dollars each, from the American Institute of Instruction, at its annual meeting at Saratoga, 1882. The remainder of the essay will be published in the next number of EDUCATION, after which the whole will appear in pamphlet form for general circulation.

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## *EBEN TOURJEE, Mus. Dr.*

This number of EDUCATION is embellished with the steel portrait of Eben Tourjee, director of the Conservatory of Music at Boston. His name is well known in musical circles and by educational people generally, on account of his great interest in all that relates to the success of professional education. We gladly tell the story of Dr. Tourjée's life, for it seems to us the embodiment of three fundamental elements of the teacher's success. Carlyle says: "The first requisite of all teaching, that without which all other qualifications are nothing and worse than nothing, is that the teacher have, lodged in the silent depths of his own being, that which he would teach." One can inspire enthusiasm in others only as he is enthusiastic himself. No teacher can lift his pupils higher than his own head. Even the great Teacher was first lifted up himself, and then drew others to him. Very few teachers have been from the first a finer embodiment of Carlyle's requisite of success than the Huguenot man born in Warwick, R. I., in 1834. When a mere child the ringing of bells and the tones of an organ filled his soul with delight. If we accept Emerson's motto, that one's talent is his calling, this boy's work was marked out for him from before his birth. Born poor, he had the stern, hard obstacles to overcome which called out his talents and demonstrated to others their existence. At eight he went to work in a factory at a shilling a day. At nine his wages were advanced to $2.25 a week. At eleven he became a Christian, and joined the church; and so marked was his musical talent, and so correct his ear, that he was generally called upon to pitch the tunes in the Sunday-school. At thirteen Governor Harris, who was then his employer, handed him the key to the church organ one Wednesday evening, with the remark, "Our organist is to leave us; I wish you would learn to play as soon as possible." With never a musical instrument to play on; with no teacher to guide his hands, and with fingers already growing stiff with toil, the boy yet sat entranced by the very tones of the organ that memorable Wednesday night, and found his learning, in the language of Cicero, more like a recalling of what he had known in some other sphere than the mastery of a foreign subject. Despite

his hard days' work, Thursday night, Friday night, Saturday night, found him late at the organ, and on Sunday he played for the choir "Greenville," "Chimes," "Naomi," and "Lanesboro," with such success that he was appointed organist. He was not flattered into contentment by his early victory, but went to Providence, thirteen miles distant, sometimes on foot, for musical instruction. By rigid economy he saved enough from his weekly wages to start to East Greenwich to school. Then, by sweeping rooms, ringing the bell, and outside work, he maintained himself for some time and took a high standing in his classes. But America has thus far been full of openings for boys of his pluck and energy, and at fifteen he was offered, and accepted, a clerkship in a store in Providence, which was still his musical Mecca. The few hours snatched from the store and from sleep, which time many a boy spends in loafing, seemed to young Tourjée to afford boundless opportunities for culture. He advanced so rapidly, both in business and his art, that at seventeen he opened a music store in Fall River, and became editor of a little paper called the *Key-Note*, which he soon enlarged into *The Massachusetts Musical Journal*. The move to Fall River afforded him means to study under the best masters of Boston, which was then, as to-day, the musical metropolis of America. Here he organized his first classes for teaching the piano and singing, as now taught in the Conservatory. Later he removed to Newport, and under the demands which his improved system of instruction made upon him, his ideal continued to advance, and later he crossed the Atlantic, seeking the best musical instruction of the old world. He gradually became familiar with the best music schools of Paris and Germany, with an occasional vacation trip to Italy, and returned with testimonials from some of the best schools on the continent. Thus by native talent and generous culture he fulfilled the first condition of teaching, became the master of his art and inspired enthusiasm in others, because he was full of enthusiasm himself.

But we have wandered beyond another important factor of Dr. Tourjée's life. A second fundamental element in a great teacher is his sympathy. He lives in and for and through others. He aims, not simply to master truth himself, but to adapt it to his students. He goes down to the platform of his pupils, and leads them step by step up to his higher plane. D. Tourjée's sympathy made him teacher and organizer of instruction for others. No one can meet him, even casually, without being impressed with the inborn grace and suavity of his manner. This grace is not simply French politeness, though the blood of the Huguenots is coursing in his veins, but springs spontaneously from a nature overflowing with sympathy. While his musical talent and culture would have made him *facile princeps* among American composers or performers, he has shown no ambition for mere personal achievement. In fact his visits to Europe have been quite as much in the interests of his pupils, to perfect a system of instruction, as for his own personal culture. His sympathy led him to imagine every boy and girl filled with the longings with which he himself had struggled, and, like a true

elder brother, he set out to give them advantages he had never enjoyed. When only eighteen years old, in addition to the management of his store, and the editorship of the *Musical Journal* and his private study, he threw himself enthusiastically into teaching music in the public schools. Even at that time he gave hints in his paper of the radical change in the system of musical instruction in America, which he later inaugurated and which he has since so grandly carried out. He wonders why our system of education in classes, which has proved so successful in every other study, should not be applied to music ; why the advanced instruction in music should be put beyond the reach of the great masses by the old method of personal lessons ; and why the favored few, who are able to pay for private instruction, should be shut up to the solitude and disheartening atmosphere of private study, and denied the stimulus and help which come from contact with congenial minds. In 1859 he inaugurated the Conservatory system at East Greenwich, R.I., with only three pupils. But his foresight had enabled him to wisely anticipate popular feeling. His school was soon running over, and he moved to Providence for enlarged facilities. At last, encouraged by his success, fortified by his experience in the great conservatories of Europe and by the authority of such masters as Mendelssohn, David, Haupt, Joachim, and others, and striving for the very highest musical advantages in America for his pupils, he moved in 1867 to Boston, and organized the New England Conservatory of Music. Here, again, his sympathy enabled him to wisely interpret the popular feeling. His enterprise supplied a deep and lasting need. Music is yet considered in America one of the luxuries, and is thus among the first interests to suffer and the last to recover from a panic. But the New England Conservatory of Music not only survived the financial crisis from 1873 to 1878, which wrecked so many promising enterprises, but grew in public favor. This sympathy it is which has sometimes led Dr. Tourjée beyond his own field to inspire new life in city missions and lay deep plans for foreign missionary work. This sympathy for others has led Dr. Tourjée and his wife to sacrifice the quiet of one of the most delightful homes in New England to organize a great Christian household for the hundreds of young women who come to the Conservatory. If the true teacher is he who gives of the treasures of science and art to the largest number, then surely the 28,000 who have been instructed at the New England Conservatory, and the hundreds of thousands to whom these have carried their treasures, entitle Dr. Tourjee to a high rank among the educators of the age. He is America's great Commoner in music.

We have already hinted at the third quality of the teacher ; viz., a vision of the possibilities that are before himself and his pupils, and a power to inspire them with his faith. Dr. Tourjee has had throughout his career an ideal of improved methods of musical culture, which he has been working steadily to realize. His early plans at the Greenwich Academy seemed visionary to others, but he soon made his department there an acknowledged success. When he first talked of the Providence Conservatory of Music,

even his friends thought him over-sanguine, yet again his first ideal was more than realized. But his ideal had advanced, and as he unfolded his new plans for a great American music school in Boston in connection with Music Hall, he again seemed to be an enthusiast and a visionary. But the 28,000 pupils who went out from that school, and the talented faculty, and magnificent building for the present Conservatory, with the largest attendance of any music school in the world, are only the ripe unfolding of the Music Hall school. The ideal now before Dr. Tourjée,—the ideal of a Christian home, of a broad, generous culture and of the finest musical training,—is a work worthy his maturest powers. May his life be spared to realize these undeveloped possibilities of American musical culture. We have been especially struck with his plan for enlarged general culture for students of music. If carried out, this plan will revolutionize musical culture, and make the Conservatory one of the potent factors in shaping the civilization of the twentieth century. We cannot better close our sketch than by a presentation of this ideal in the language of the latest catalogue of the Conservatory:

"It is generally conceded that the study of music tends to refine the manners and cultivate the taste. At the same time the impression prevails that the concentration of effort necessary to insure the success of students pursuing a musical course precludes all possibility of culture in other directions. This impression is not only false, but the director is convinced by years of study and experience that music opens up the way to a broad and liberal culture. Education is a whole simply because man is a unit, and one part of the man cannot be developed to the highest point without the cultivation of the other parts of the nature. We might as well talk of a man becoming a good blacksmith by the cultivation of his arms alone, without any care of his stomach or his lungs, as to speak of a man becoming a great musician by the mere cultivation of his fingers, without any attention to the emotions and the mind, in which music has its inspirations and its ideals. Those who have had the longest experience in music are painfully aware of the inharmoniousness of an uncultivated musician or of a mere technicist, without a general culture. Hundreds of musicians are failing to take the highest positions in our colleges and universities, because of their limitations in this respect. Upon the other hand, the world is painfully aware of the undesirability of men whose minds alone are trained, while their manners are uncouth, their bodies unhealthy, their tones unpleasant, and their emotional and moral faculties undeveloped. We aim to overcome the one-sidedness of men's intellectual training upon the one hand, and of most private instruction in music upon the other, by the Conservatory system combined with a generous culture. *Our idea of education is the harmonious development of all one's faculties to their highest power and their application to the highest use.*"

## *REPORT OF THE UNITED STATES COMMISSIONER OF EDUCATION*, 1880.

The report of the United States Commissioner for 1880 has a two-fold claim upon our attention. It presents a complete record of the specified year and a brief survey of the decade. In the introduction the Commissioner observes that "the important relation which the office sustains to the interests of education becomes constantly more apparent." It is equally true that the bearing of education upon national progress is more clearly comprehended than at the beginning of the decade, a change in great measure due to the publications of the office.

The series of 26 tables, comprising about one-half of the appendix of the volume before us, are the result of what appeared at the outset the most difficult part of the proposed work. It was necessary to devise a scheme of statistics suited to the conditions of our country, to secure the voluntary coöperation of countless officials in filling up the blank forms, and this in the face of a general want of confidence in the applicability of figures to the subject-matter of education. It is chiefly owing to the persistence with which General Eaton has maintained this mode of representation that its importance has come to be so generally recognized among us, and that our school statistics compare so favorably with those of European nations.

"Knowledge is power." In proportion as this aphorism is accepted, and especially in proportion as it is interpreted to mean diffused knowledge, is the demand for a record of the means of education. Whatever may be the order of the record, for purposes of study it is finally resolved into Quantity, Quality, and Results.

Facts relating to the first topic have all along been most fully reported by the correspondents of the office. In the present report, school population and enrollment in public schools are given for all the States and nearly all the Territories. It is safe to assume that the 63 per cent. enrolled will master the rudiments of learning, but it would be unfair to infer the converse with reference to the remaining 37 per cent. The legal school period in the United States is from 10 to 17 years. In the States in which this period agrees most nearly with the average period in foreign countries, viz., 8 years, the enrollment is a very high percentage of school population. Thus, in Massachusetts, New Hampshire, and Rhode Island, in which the term is 10 years, the per centages are respectively 99, 90, and 87; in Texas, where the term is 6 years, enrollment is 89 per cent of school population. In South Carolina, where the school period is the same as in Massachusetts, enrollment falls to 58 per cent. of school population.

By reference to Table II., appendix to report, it will be seen that the majority of pupils enrolled in the city public schools are in the primary and grammar grades. If the figures could be extended into these details for the entire country, it would appear that the enrollment and average attendance between the ages of 6 and 12 approach much nearer the school population between those ages than is the case for the years between 12 and 16. Without classification the figures throw little light upon the quality of our schools. Since 1872 the office has been laboring to impress this fact upon its correspondents by the use of distinct forms of inquiry for elementary, secondary, and superior instruction. The idea is of slow acceptation, as will be seen by the table just referred to. Of 244 cities there included,

only 110 attempt a classification of pupils; yet cities have special facilities for determining the requisite facts.

While, for the purpose of comparative study, fuller and better classified statistics are indispensable, one important conclusion may be affirmed upon the present showing. Comparing the census tables of illiteracy with the school statistics, it is evident that illiteracy bears an inverse ratio to the condition of public schools; where they are most numerous and flourishing, illiteracy is at the minimum, and until the reverse is true, no argument, criticism, or opposition will prevail against them.

The status and qualifications of teachers differ greatly in the several States The occupation is not highly remunerative; average salaries for men ranging fron. $25.24 a month in South Carolina, to $101.47 in Nevada; and for women, from $17.44 in Vermont to $77 in Nevada. In North Carolina, with school year of 54 days and an average salary of $21.75 a month, a teacher has the animating prospect of an annual stipend of $39.15; in Nevada a teacher of the male sex may cherish an average annual expectation of $483, while his sister laborer is rated at $366.50; Massachusetts offers to men the average annual inducement of $398.25, and to women of $180.54; Ohio, to the former $280, to the latter $195. The figures are not flattering to us. In France the minimum salary of primary teachers is $190, the maximum $418. The Prussian government proposess to raise the elementary school-teachers' salary to a minimum of $200. In England the average salary paid to masters in all classes of schools receiving the royal grant is, in round numbers, $600; average in School Board schools, $628. The averages for school-mistresses are, respectively, $360 and $425.

The extract from the report of Gov. George B. McClellan, quoted by the Commissioner, is interesting in this connection. It suggests as a fit subject for the consideration of the Legislature, a thorough examination of the school system, and the determination of essential details, among others the minimum salary of teachers; and this being done, the fixing of a rate of State school-tax each year sufficient to produce the required sum. Such action might raise every district above a ruinously low rate, and would offer no obstacle to local liberality.

In the cities teachers command fair salaries, as may be seen by reference to Table II., which presents the average annual salaries in various grades. The largest amounts are $6000 to principal of Normal School of New York City, and $3,780 to principal of the High and Normal Schools, Boston. The smallest amounts are $200 to male teachers in primary schools, and the same to female principals in grammar schools, Carbondale, Pa. Principals of grammar schools receive salaries as high as $2,700, $2,500, and 1,800, which last sum the city of Salem has the courage to pay without distinction of sex.

Continuity of service is a vain expectation where salaries are less than laborers' wages, but it seems as if our cities and wealthy townships might evolve some safe and respectable tenure. The Massachusetts legislature has endeavored to place the teacher's term of service upon a worthier basis than skill in flattering superior officers, or humoring the caprices of patrons, or polling voters for aspiring politicians, which are too often the qualifications canvassed in that ambiguous ceremony, an annual election.

Special training for teachers has arisen partly from the effort to advance the service to the dignity of a profession and partly from the necessity, in the employment of so large a force (viz., 282,644) of making the best of poor material. The same end is sought in other countries in various ways; in England, by the employment of pupil-teachers; in Prussia and other German States, by the establishment of different classes of normal schools. In the United States normal institutes and

summer normals have been found excellent agencies for improving the teachers of rural schools; graduates of normal schools, as a rule, being sought for more remunerative places. Normal departments are increasing in secondary schools and colleges, especially of the South and West, and a number of influential colleges and universities are seeking endowments for chairs of Pedagogy. Such chairs are sure to come with increasing wealth and knowledge, and, as the Commissioner observes, "will exercise a powerful influence in the educational affairs of a State."

The present status of normal schools is admirably set forth in the report. The total number of normals is 220; classified as public 106, private 114. Of the former 84 are supported by State appropriations, 1 by county appropriations, and 21 by city appropriations. The public normals, though numbering 8 less than the private, have 8,000 more pupils and 340 more instructors. It is also noticeable that a much larger proportion of the pupils of public normals are normal students,—*i. e.*, preparing to teach,—than of the private institutions. Public normals derive their support from annual appropriations, which are generally liberal. The largest appropriation to a single institution in 1880 was $95,000 to the Normal College, New York City. Four other institutions received more than $20,000 each, and appropriations of $25,000 and upward were made by eight States to this class of schools.

The objection is sometimes raised against these schools that their results do not warrant their expense, and as libraries, laboratories, etc., are multiplied unto them, jealous apprehensions arise in some quarters lest they should encroach upon the ordained province of the colleges. The former objection has been repeatedly exploded by investigations conducted with unsparing animus; the latter is an idle crotchet. The grade of scholarship that ought to be maintained by colleges if they are to count for anything in public progress, is not, and need not be, a *sine qua non* for normals. On the contrary, the ideas of mind, of matter, of methods of instruction, of moral and physical development which it is the province of normal schools to inculcate, are indispensable to that great body of young people from whom the teachers' ranks will be recruited, but who for obvious reasons would never be prepared for the college curriculum.

The Commissioner dwells upon the need of bringing science-knowledge and correct methods of science-study to the attention of normal students. Evidently he has in mind that knowledge of matter and material phenomena which is required in ordinary lives, but too often ignored in ordinary schools. Recent conferences in England, France, and Germrny show that it is not easy to point out a correct method for the acquisition of such knowledge. Something is accomplished when teachers are warned against a treatment that renders familiar things strange, past recognition.

In the Southern States the number of men engaged in teaching, and enrolled as normal students, exceeds the number of women; the reverse obtains in the Northern States, a condition that suggests the possibility of decided differences in the issues of elementary education in the two sections. The disproportion between the number of teachers required in the schools and the graduates of public normal schools is a reason for encouraging private normals, notwithstanding their inferiority to the public normals in funds and appointments. Most of these private normals are denominational schools, and their spirit is eminently moral and Christian,—elements of no mean value in the teacher's preparation.

The summaries of school income, expenditure, permanent funds, etc., afford interesting studies. Delaware, Colorado, Nevada, New Hampshire, Oregon, Rhode Island, and Vermont are the only Northern States in which the annual income

falls below $1,000,000. Virginia is the only Southern State in which the income reaches that amount. The chief sources of income are State and local taxes and the interest on permanent funds The ratio of the amount raised by taxation to the whole income does not vary much in the several sections. In the New England, Middle Atlantic, and Northern Central States it is 80 per cent. and upward; in the Southern Atlantic States it is equally high, excepting in Florida, where it falls to 70 per cent. It is 80 per cent. in three of the Southern Central States, and in the remaining three ranges from 50 to 70 per cent. It reaches the lowest rate, and varies most, in the Gulf States and the States of the Pacific coast, falling to between 40 and 50 per cent. in Mississippi and Nevada. If the figures be accurate enough to form the basis of general conclusions, it would appear that the meagerness of income in the Southern States is owing to the lack of permanent school funds. This deficiency, and the illiteracy which accompanies it, give rise to the appeal for national aid.

The proposed measure of relief is in the line of the policy hitherto pursued by the government as shown by the record of national land grants in the report before us. The total number of acres thus appropriated up to June 30, 1880, was 78.659,-434, of which upward of 80 per cent. was for common schools.

Kindergärten, which are chiefly under private auspices, have increased from 43 in 1873, to 232 in 1880, having 524 instructors and 8,871 pupils. It will be observed that the legal school period in twenty states includes children under six years of age; but we are behind England and France in public provision for schools specially adapted to children of such tender years. In France, in 1880, there were 606,014 children in the "Ecoles Maternelles." In England and Wales there were by the latest report 1,268,250 children under seven years of age upon the registers of aided schools.

Public provision for the industrial training of the masses is limited to sewing as conducted in the girls' grammer schools of Boston, and industrial and free-hand drawing as required by the school laws of Massachusetts, New York, Vermont, and a few cities. Considering the industrial importance of drawing, it is difficult to understand why the branch is so generally neglected.

Our efforts to combine workshops with schools have failed; but if France maintains the system, as seems probable, and England imitates her, we shall without doubt renew the experiment. Meanwhile institutions like the School of Mechanic Art in connection with the Massachusetts Institute of Technology, and the Manual Training School in connection with Washington University, St. Louis, are bringing certain theories of manual training to practical tests. The system of instruction and training pursued in most reform and charity schools might seem to give color to the assertion that the unfortunate and vicious have the chance of a better preparation for life than those more favored by fortune. In 1880 such institutions had about 70,000 inmates,—certainly not a large number as compared with the massess of youth in our cities who must early shift for themselves without knowing how to do anything, or with the colored youth in the South who are destitute even of the traditions of morality and industry.

Secondary instruction is not a definite expression in the United States. The number of pupils represented as receiving its benefits in all classes of institutions reporting under the head is 196,499, or a trifle above one per cent. of our school population. The basis of comparison, it should be observed, may properly be assumed in all but the four States in which the legal school age-ends at 14 or 15 years. A distinction has recently been allowed between education and culture; secondary schools are supposed to promote the latter, whatever their relation to

the former, upon which conception alone an understanding of their nature and effects is desirable. That broader view expressed by the commissioner, namely, that "it is the province of secondary schools to form intellectual tastes, to excite vigorous mental action, and to awaken intelligent interest in all subjects of knowledge," increases our disposition to inquire what these schools are doing for "sweetness and light." Whether it be from a peculiar modesty, want of system, or a spirit of monastic secrecy, institutions of this class make fewer revelations bearing upon quality. In the case of secondary schools, Table VI. of the Report, a single suggestion is afforded. Out of a total of 110,277 pupils they had 9,397 preparing for classical or scientific courses in college. Preparatory schools, Table VII. it is stated, "have more uniform grade, and more definite aims and courses of study than the secondary." This would be inferred from their location and special function as training-schools for the colleges. They number 125, of which 92 are in the New England and Middle Atlantic States; it is hardly necessary to add that they are liberally endowed with respect to funds, appointments, and teaching-force. Phillips, Phillips-Exeter, Hopkins Grammar, Boston Latin, and a few other names in the list are as truly guarantees of excellence as Eton, Harrow, or Rugby. The data bearing upon secondary education point unmistakably to the need of larger endowments and better organization for its conduct. The Commissioner points out one important measure for its improvement: "Guarantees of excellence," he observes, "may with propriety be required from all chartered institutions. If this were done, and the incorporated schools in each State held to definite standards, those of merely private character would as a consequence cease to exist or would conform to the same requirements."

Provision for training in science and art is not a more marked feature of our progress than the increase of facilities for classical and philosophical study. So much attention has been drawn to the action of Government in endowing schools of science and technology that we are in danger of overlooking what private liberality has done for the classical colleges. The proceeds of the land grant for 1862 amount thus far to $7,553,405, a sum exceeded by private benefactions to six of our universities or colleges during the decade. In 1880 benefactions to universities and colleges amounted to $2,666,571, to schools of science $1,371,445.

Our limits do not permit the notice of the remaining topics of the report. Movements for the better education of women, for the increase of libraries, for the education of the unfortunate classes, the attention paid to school architecture and to the conditions affecting the health of scholars, leave us with the impression that—if we are "the most common-schooled and the least cultivated people in the world," our schooling is rapidly working for culture. Even the history of diploma-selling is not wholly to the discredit of American intelligence, as will be seen from the interesting account of the Buchanan exposé embodied in the report.

Our examination of the report has been confined to the statistical tables and the Commissioner's summary; the "abstracts" of the appendix contain more detailed information touching every phase of progress, and it might almost be said every institution and agency for the diffusion of knowledge.

Examination-passes and percentages, the accepted criteria of educational systems, do not figure extensively in our reports; we make, however, some impressive exhibits of a higher order of results. "The best political economy," said Emerson, "is the care and culture of men." With a voluntary school-tax of $70,371,435 in a single year; with private benefactions amounting from 1872,to 1880 inclusive, to $54, 000,000; may we not conclude that our schools are gradually raising our whole people to the level of this grand idea?

## FOREIGN NOTES.

GREAT BRITAIN.—*Elementary Schools.*—The latest report of the Committee of Council on Education, for the year ending September 30, 1881, has been received at the Bureau of Education. From this report it appears that, in the specified year, the inspectors visited 18,062 day schools in England and Wales, to which annual grants were made, containing 26,376 departments under separate teachers, and furnishing accommodations for 4,389,633 scholars, or rather more than one-sixth of the population. On the registers were enrolled 4,045,362 children, of which number 2,573,800 were between the ages of 7 and 13 years, the period to which the compulsory school attendance acts apply; 1,268,250 were under 7 years, and 203,311 were above 13. The average daily attendance throughout the year was 2,863,535. The number qualified for examination by reason of having made the requisite number of attendances was 2,775,150.

The government grants amounted to £2,247,507, or 15s. 8¼d. per scholar in average attendance. Some interesting facts are brought out by the comparison of the work of the present with that of the past years, as also the status of Board with that of Voluntary Schools. School Boards are making rapid advance throughout the country, the number of their schools having risen from 826 in 1874, to 3,692 in 1881. The number of Voluntary Schools in 1874 was 11,341, with accommodations for 2,626,318; while in 1881 the numbers were respectively 14,370 and 3,195,365. Voluntary subscriptions fell off during the year to the amount of £10,000. The treasury of the Voluntary Schools was, however, helped by enlarged grants and the increase of school fees. The cost per scholar in average attendance last year was £2 1s. 6d. in the case of Board Schools, and £1 14s. 11½d. for Voluntary Schools; the average amount of rates had fallen from £1 2s. 2½d. in 1876, to 16s. 11¼d. in 1881. The activity of School Boards may be judged by the extent to which they have availed themselves of the power of borrowing on the security of the rates, given by the Acts of 1870 and 1873. For the erection of new buildings, 1,637 School Boards have taken loans to the amount of £13,784,694 (about $65,000,000), or an average of £12 5s. 1d. for the accommodation of each child. The rule with the Boards is to build substantial houses, due regard being paid to light, ventilation, sanitation, etc. In 1874 there were 18,714 certificated teachers; 2,489 assistants, and 27,031 pupil-teachers. In 1881 the numbers had risen to 33,562 certificated teachers, 8,559 assistants, and 33,639 pupil-teachers.

Salaries still average better than in other countries, but have slightly diminished within a year. The average salary of a certificated master fell from £121 2s. 7d. in 1880 to £120 16s. 1d. in 1881; in the case of mistresses the decrease is from £72 12s. 8d. to £72 10s. 4d.

*Training Colleges.*—There are 41 Training Colleges in England and Wales, of which 17 are for masters only, 23 for mistresses, and one for both sexes. These were attended in 1881 by 3,116 students. The total expenditure was, in colleges for masters, £80,113 3s. 1d., or £59 8s. 7d. per student; in colleges for mistresses, £71,191 9s. 3d., or about £41 15s. 7d. per student; and in the college for both sexes, £2,828 18s. od., or £53 7s. 6d. per student. We shall never be able to estimate the cost of preparing teachers in the United States till our Normal schools report thus in detail.

*Elementary Schools.*—In Scotland the inspectors visited 3,074 day schools in receipt of annual grants, containing 3,395 departments under separate teachers, and furnishing accommodation, at 8 square feet of superficial area per scholar, for 612,483 children, or about one-sixth of the population. On the registers of these schools there were enrolled 544,982 children, of which number 390,531 were between 7 and 13 years; 112,680 were under 7, and 41,771 above 14. The average daily attendance throughout the year was 409,966; the number qualified for examination by reason of attendances, 400,409. The average salaries in schools of all classes receiving grants were, for certificated masters, £137 5s. 7d., and £69 4s. 3d. In public schools the averages were respectively £136 15s. 1d. and £67 17s. 1d. Of the training colleges under inspection, 4 are for both masters and mistresses, and 3 are for mistresses only. The attendance in these schools in 1881 was 857, and the total expenditure for their support was £33,938 os. 10d.

*Scotland vs. England and Wales.*—The report of the Inspectors' examinations shows a somewhat higher degree of attainment in the schools of Scotland than in those of England and Wales. The number of pupils presented for individual examination in the former was 311,228; in the latter, 1,995,698. In Scotland 91.93 per cent. passed in reading, 88.85 per cent. in writing, 84.19 per cent. in arithmetic. In England the per cent. of passes was: in reading, 88.99; in writing, 80.78; in arithmetic, 75.69.

*Circular to Inspectors.*—The new Education Code which goes into operation next Spring invests inspectors with a discretion not allowed under the present code, touching eleven important points. The opposition which this excited is likely to be somewhat allayed by the circular recently issued from the Education Department, for the guidance of inspectors. In this document explicit directions are given for maintaining uniformity in examination standards; provision is made for appeals to the senior inspectors in cases of real or apparent hardship; the method of procedure in the examination of infant schools is carefully outlined; and, even in the vexed matter of the merit-grant, the directions, if followed, would insure justice in deciding between fair, good, and excellent schools. The general directions to the inspectors are conceived in the happiest spirit. They are enjoined to be punctual in meeting their appointments for examination, and to avoid haste, impatience, or other action that might worry timid, nervous children and teachers. Inspectors, however, "are but men," and no paper rules can

eliminate their personality from their work. Perhaps the most promising clause in the circular is the assurance that inspectors hereafter appointed shall be specially trained for the service. It is noticeable that while the London Times seems to find in the circular a corrective for all faults of inspection, the education journals regard it as only a tentative good.

FRANCE.—*The New Law.—Infant Schools.—Primary Schools.—Secondary Schools for Girls.*—The new Education Law of France went into operation October 2. Preparations have been pushed with energy since the passage of the Act in March, and enough has been accomplished to insure an impressive beginning. Until his resignation, Jules Ferry did not cease his efforts to create school funds equal to the requirements, to drill teachers in their new duties, and to inspire them with something of his own zeal, and to arrange plans in detail for special features of the system. Since the 7th of August the work has passed into the charge of his successor, J. Duvaux. Infant schools (*Ecoles Maternelles Publiques*) are no new feature in the French System, but in anticipation of the approaching session, they were the subject of an elaborate circular issued by Jules Ferry. The object of the "Ecoles Maternelles," as set forth in the circular, is to give to children below the school age the care necessary for their physical, intellectual and moral development, and to prepare them to receive with profit the primary instruction. Study is not required; instruction and exercise are treated in the circular under the heads which give one the impression that the French "infant" must be a marvel of receptivity. Lessons on familiar objects and the first notions of natural history are arranged for each month, much after the manner of the schemes prepared for primary teachers in Boston.

With reference to the order to be followed in these lessons, the circular says: The endeavor should be to combine as much as possible and with reference to the same object, the lessons on objects, design, the moral lesson, the plays, and the chants, in order to produce by this union a more lasting impression upon the mind and heart of the child.

The organization and plan of studies for the public primary schools are arranged in detail. The course is in three parts; elementary (7 to 9 years), middle (9 to 11 years), and superior (11 to 13 years), which division is obligatory in all the schools, whatever may be the number of classes and of scholars. In any commune where there is no "Ecole Maternelle," a class for children under school age may be formed in the primary schools. If more than 10 scholars who have received the certificate of primary studies desire to continue their studies, a complimentary course of one year may be added. Teachers will recognize the practical wisdom of many of the regulations for primaries: thus, it is ordered that the exercises which make the greatest demand upon the attention shall be assigned for the morning hours. The training in gymnastics and military exercises is regulated by manuals distributed among the schools. The directions with reference to manual work are particularly interesting to us just now. In the course laid down

for boys, tools are not introduced till the close of the middle course, when notions of the most useful tools are to be imparted. The superior course provides for exercises with the principal tools used in working wood and iron. The manual exercises for girls are chiefly knitting, sewing and cutting. In the superior course, notions of domestic economy are included with practical exercises in cooking, and in the management of the house, garden, etc.

The last step in preparation for the opening of the schools was the circular addressed September 7, by Minister Duvaux, to the prefects, calling their attention to the declaration required from parents and guardians of their intentions with respect to the education of their children. Immediately following the issue of the circular, the *Official Journal* published a model of a letter to be sent to parents. A correspondent of *The London Times*, in a letter dated September 22, declares that the authorities have been remiss and discordant in this preliminary measure.

The Act prescribes that the parental declaration shall be made at least a fortnight before the commencement of the term, but in most cases the summons was not issued early enough for this purpose, and a later date has been fixed. The clericals contend that this is illegal, and that consequently the declaration has lapsed for this year. Mayors were at first directed to refuse collective declarations ; subsequently a circular was issued, whereby the registers of State and Sectarian schools exempted parents from declaration, leaving the formality binding upon those only who prefer home tuition. This circular does not apply to Paris, and the Paris Mayors are requiring individual declarations. The Catholics do not seem to be agreed upon any mode of meeting the Act, but their opposition to secular education is manifest. The questions now pending are : whether France will be covered with opposition Catholic Schools, or whether the State Schools will meet the scruples of the Catholics by remaining neutral instead of rushing to an extreme irreligion.

In his speech of July 2d, before the Philotechnic Association, Jules Ferry depicted in glowing terms the effect of the liberal education of women upon the destinies of France. He labored in every way to promote this cherished ideal. The following programme for secondary schools for girls was issued just before his retirement. The course occupies a year, the students being 15 or 16 years of age.

*Studies and Hours for Each Week.—Obligatory Course.*—Morals, 1 hour ; French language and literature and Ancient literatures, 4 hours ; living languages and foreign literatures, 3 hours ; summary of the history of civilization to the time of Charlemagne, 2 hours ; cosmography, 1 hour ; animal and vegetable physiology, 1 hour ; physics, 1 hour.

*Optional Course.*—Ancient literatures, 3 hours ; elements of Latin language, 1 hour ; mathematics, 3 hours ; vocal music, 1 hour ; design, 3 hours